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# THE TECHNIQUE OF ADVERTISING

## IN GRATITUDE

# TO HARRY WHETTON, ESQ. EDITOR OF "THE BRITISH PRINTER"

# THE TECHNIQUE OF ADVERTISING

THE METHOD OF
INFLUENCING THOUGHT AND ACTION THROUGH
THE PRINTED WORD AND ILLUSTRATION

WITH AN OUTLINE OF THE
ASSOCIATED REPRODUCTIVE CRAFTS

BY

J. FOWLE-FROMINGS



LONDON SIR ISAAC PITMAN & SONS, LTD. SIR ISAAC PITMAN & SONS, Ltd.
PITMAN HOUSE, PARKER STREET, KINGWAY, LONDON, W.C.2
THE PITMAN PRESS, BATH
PITMAN HOUSE, LITTLE COLLINS STREET, MELBOURNE
ASSOCIATED COMPANIES
PITMAN PUBLISHING CORPORATION
2 WEST 45TH STREET, NEW YORK
205 WEST MOROE STREET, CHICAGO
SIR ISAAC PITMAN & SONS (CANADA), Ltd.
(INCORPORATING THE COMMERCIAL TEXT BOOK COMPANY)
PITMAN HOUSE, 81-383 CHURCH STREET, TORONTO

### INTRODUCTION

THE modern Press advertisement or piece of advertising print is, in the majority of cases, the result of the joint effort of several persons, each a specialist in his own sphere. In order to arrive at the best result, each should know something of the work of his collaborators. To assist in imparting knowledge of that very necessary something is the aim of this book.

All of it will be of interest to the student of advertising—maybe studying for examination—and also the business man who wishes to become acquainted with this many-sided subject. Some of it should be of value to the specialist, be he copywriter, commercial artist, lay-out designer, typographer, or "live" printer who may be called upon to produce advertising hits off his own bat.

Realizing from early experience that the value of a textbook lies in the manner of presentation, care has been given to the question of continuity. Separate subjects have been treated in logical order, the chapters linking up with each other as far as possible. Short summaries of foregoing matter have been included.

Most of the illustrations are in the form of diagram sketches by the author, and are of an instructive nature as opposed to purely specimen pieces. The reason is that the writer wishes the reader to form his own judgment as to what is good, bad, or indifferent—a piece of free training apart from the book. An advantage of this is, that principles having been grasped, new subjects for admiration or criticism may be encountered every day. There is no danger of copying a style which might become obsolete.

Colour is a great force in advertising. There is plenty of interest in the chapter on that subject. To many, the Ostwald Colour System will be something new. As the method adopted in 80 per cent of the schools, it is worthy of careful study.

Should the reader, in his kindness, consider I have attained something near success in the task of concentrating the subject of several volumes into the space contained between two cover boards, I shall be satisfied that my time and labour have been well spent.

#### J. FOWLE-FROMINGS

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# THE TECHNIQUE OF ADVERTISING

#### CHAPTER I

#### THE IMPORTANCE OF GAINING ATTENTION

ELIMINATE counter-attractions—Strength of sensation—The role of contrast—Ease of comprehension—Make the caption tell—Fusion

UNLESS a printed advertisement can gain attention and do that quickly, it is as big a failure as would be a town crier—if he were a dumb man—without the traditional bell. This might seem rather a commonplace statement, but it should be realized that there is a difference between seeing an advertisement and simply sensing it.

Many an announcement is overlooked because its "stopping value" has been annulled either by violation of the principles of attention or by absolute ignorance of them.

The saying, of which inability "to see the wood for trees" is the theme, can in a way be used to illustrate the first principle of attention. Too many components of equal attention value and grouped together, blind the vision for the whole. Each component in such case is a counter-attraction to every other, and as there is a limit to the number of objects which can be "taken in" by the eye at one time, confusion arises and none of the components is actually seen.

This first principle of attention is what might be called segregation or the standing on its own of any element to which we wish to draw attention. If we have four display lines of equal weight, each line has a one in four chance of being seen, whereas one strong display line standing on its own, with the other three "taking a back seat," stands a far better chance of gaining the attention of a reader glancing through the pages of a publication.

As every play or opera has its leading lady, so must a layout have a leading element which is the centre of attraction. It can be a striking illustration, or a dominant headline so worded that it will halt the reader by reason of the interest contained in its plain statement of fact, or by question, suggestion, or maybe by a train of thought that, by association of ideas, it starts in the mind of the reader.

Attention gained must be of the right kind. Cleverness is not always good advertising. The picture of a monkey, together with a caption worded: "Here you are!" might cover the instigator's idea of a joke, but the attention gained would be of the wrong kind. It would give offence to some and disgust many by its pointless silliness.

#### STRENGTH OF SENSATION

Whatever idea is used for the purpose of gaining attention, it must deal with a line of thought which is either directly bound up with, or in some way closely related to the goods advertised. It must not be simply an attention gaining trick. A caption must make a strong statement of interesting fact, start a line of thought along the buying path, suggest the existence of a want and the means of filling it, or make the reader say: "Just what I've been looking for."

Search the advertisement pages, and analyse your reactions to the various means of appeal. What is it that attracts you to any particular advertisement? Why did you read on or lose interest? Much can thus be learned.

Attention to any particular thing or object depends upon the strength of sensation it arouses within us; in other words, how it impresses us. A man walking on the ground might not draw a second look from passers-by; but that same man, perched as a steeplejack on a high chimney, will draw an interested and impressed crowd.

Movement and life attract. Pictures of people "doing things" can, in general, be said to be more attractive than representations of tailors' dummies. When considering such attraction, however, we must bear the circumstances in mind. An advertisement for milk might parade the result of the use of plentiful supplies of that body-building food—happy children at play, full of vim and vitamins.

On the other hand, a good advertisement for custard powder could, just as effectively, use a still-life picture. In this latter case, with a really beautiful picture of luscious fruit, backed up by "the" custard powder shown in carton and also in its golden glory displayed in serving-glass, the appeal is more to appetite and thought of good things to come than to thought of resulting benefits. The copy could, of course, incorporate a combination of both methods, but we are dealing with the phase of attraction. In the case of the milk, we play on the anxiety of the mother for the well-being of her youngsters. With the custard, we strive to put over the fact that here is something really as attractive to the taste as it is to the eye. Both are "feeding" subjects but are approached from opposite ends. One says: "It's good for you!"; with the other, you are left to draw your own conclusions.

Colours have high attention value, owing to the strong visual sensation which they set up. Red is the strongest compeller of attention, with green as second. These colours are used for railway and road traffic signals. Apart from their visual effect, colours can make further impressions through associations in the mind of the observer.

Red is associated with fire and warmth, blue with cleanly coolness, yellow with light, and warm browns with the tints of autumn. It will be appreciated that the use of colour which is in close association with the subject of the article to be advertised will greatly assist in strengthening the attention value of the layout, e.g. a clean blue for refrigerators; red or warm orange for gas fires; warm browns for autumnal subjects; and when dealing with themes requiring clean freshness, coolness, and restfulness, we use the green of Nature at her happiest. Colours vary in tint and shade—a blue can be heavy and dowdy—and this should be taken into account. One word of warning: never overdo the use of reds. Too much red in a layout is overpowering and defeats its own purpose. In order to convince the reader of the actual nuisance it can be, the following test is recommended. Obtain a piece of bright red paper or a piece of printed matter carrying a large area of red. Gaze at the red for a few seconds and then look at the ceiling. In all probability the vision will have

become fuzzy, and we shall see what is known as an afterimage, green and somewhat phosphorescent-like. This image will persist even when the eyes are closed.

#### THE ROLE OF CONTRAST

Contrast plays a big part in attention value. Consider an extremely cold day in mid-July. It is a strong contrast to the usual warmth of the average July day, and so it forces our attention. Should it be a record cold day for July, it is still further remembered, particularly if the previous corresponding day was a record for heat. The hero of Gulliver's Travels illustrates the three principles of attention which we have dealt with up to now. Gulliver drew the attention of the Lilliputians because there was only one Gulliver, and so the principle of the absence of counter-attractions was at its strongest. He was a display line among the smaller types and attracted attention through the strong sensation aroused by his size. He was a novelty to the little people and drew their notice through their realization of his contrast to themselves. Size, however, is not the only method of playing on contrast. We can make our advertisement contrast with others preceding and following it—as a whole. We can also have contrast within the layout in the way of larger type faces for display -ornamental, shaded, script, or just ordinary. Contrast may be formed with colours, but care must be taken in their selection: they must help one another.

In those last five words, we have summed up the job of contrast in the layout. Any contrast must be such that it assists in making the whole stronger in attention value. A large number of mutually contrasted elements in an advertisement, if each is rather dominant in feature, can, between them, spoil the whole effect. Each element is in such case, by reason of its dominance, really no contrast at all but a counter-attraction to all the others. Thus the attraction value of the whole suffers.

If in doubt, rely on one strong contrast in your layout. It will be seen from the foregoing that we have to watch our step when applying these principles for the attraction of attention, lest through incorrect application of one, we violate another of equal importance.

#### EASE OF COMPREHENSION

Whatever we do in order to create intensity of sensation or strength of contrast, whether by general treatment, illustration, or through the medium of the wording of our caption, let us be simple, keeping our intention and meaning crystal clear. This brings us to the principle that attention value of any particular thing depends upon the ability of the observer to interpret its real meaning: to comprehend or understand it. The wireless can be used as a good illustration. Turning to the programme, we see a talk advertised. It seems to be an interesting subject, and so we listen. To our disgust, we find that the speaker is dealing with the subject, which we thought would be interesting and simple, in technical terms and language we do not understand. We switch off and leave the speaker to waste his breath.

Remember that our attention in the first instance was voluntary. The meaning of the speaker was obscure to us, and so we gave up all attempt to understand. What chance has an advertisement of unfamiliar theme, where attention is involuntary and must first be drawn?

Stick to the familiar where possible; but should the subject of the advertisement be something new to the experience of the public, present it as an improvement or modification of something similar and familiar. The name and an illustration of an up-to-date gramophone would convey nothing understandable to the person who was only familiar with the old type of phonograph. Both were constructed to perform the job of reproducing sound, but their variation in name, appearance, and performance is something to compare and explain. After Stephenson's Rocket, the highway gave place to the railway or railroad, and the locomotive was referred to as "the iron horse." The early gramophone would have been "a greatly improved talking machine," and the first train a mechanically drawn and faster-moving stage coach.

Every improvement is a modification of something which has gone before, and at each stage the familiar is the groundwork for such modification. The first enclosed railway carriage had the familiar lines of the stage coach.

Early automobiles and motor-buses followed with coachwork similar to that of the corresponding horse-drawn vehicle. Just imagine the effect of streamlining on the feelings of the ordinary man, if it had arrived like a bolt from the blue within the first year of the coming of the motor-car.

Even inventors go in easy stages, therefore how much more necessary it is to make our message clear, understandable, and as "familiar" as possible when dealing with the unversed layman.

This question of attention value is so important that we should give the utmost thought to its principles. By such consideration only can the "face value" of our advertisement be brought near to maximum.

The arousing of attention can come about in two ways. The first, is a kind of shock tactics through that which is different or in contrast. Examples of this are the cry of the tradesman breaking in loudly on the comparative quiet, the arresting touch on the shoulder of a friend, andwhich more closely concerns our subject—the large contrasting type-face of the display line in an advertisement, or maybe a striking illustration. The second road to attention is through the mind or thinking mechanism of the reader. It depends on a full understanding or perception of that which we place before him. We show him a picture through which we intend to create a certain impression, or words in the form of typographical symbols by which we hope to help him shape an idea. If the basic idea is familiar, the reader of the advertisement will not only be in a position to consider it, but will add further thoughts and ideas of his own, these being drawn from his own previous experience. If, on the other hand, the idea is absolutely foreign to his experience, its attraction value is lost on him. That which we cannot understand does not interest us. "see" only those things which are backed by our experience.

Make your idea clear and understandable and be sure that in its manner of presentation it will fall within the experience of the greatest majority. Remember that your job is not only to attract and interest, but to set up a line of thought connected with the goods advertised. Introduce the new through the familiar, and the sense of novelty in the familiar will help attraction.

#### MAKE THE CAPTION TELL

Avoid generalities when wording captions. Put them there for a reason and make them convey something to the reader that is directly connected with the theme of the advertisement. In plain language, do not include any so-called illustration or display line which, by its vagueness, lack of reason, or difficulty of interpretation will make the reader say—if you are lucky enough to gain his attention—"What on earth is it all about?"

#### "FUSION"

Before concluding this chapter on the principles of attention, it might be as well to impress the following points on the reader. Attention roves unless arrested by something of interest. While so roving—while not focused on any particular thing—the eyes observe nothing. The eye selects a particular object for attention, but only after it has seen the greater whole of which that object forms a component part. This first impression welding of the component parts into one whole is known as "fusion." Lastly, there is a limit to the range of attention.

A "flat" layout, with no outstanding feature, is a case of what might be called natural fusion. It is simply an unperceived whole. Help the eye in its selection process by giving it an interesting picture or headline which will aid perception and link up with past experience, let the one headline be dominant, with other components carrying more or less weight according to importance. You will then have a layout, worked out on psychological principles, which will gain attention, arouse interest and, if the copy is as well constructed as the layout, sell the goods.

#### CHAPTER II

#### COLLECT "EVIDENCE" BEFORE WRITING COPY

How to analyse product appeal—What is the commodity or service?

—The appeal to the pocket—The appeal to the senses—The appeal to self-interest—Overcoming instinctive caution—Making and breaking buying habits

BEFORE we write the first word of copy as it is to appear for publication, we must collect our "grounds of appeal."

In the first instance, we must write down every fact we can think of regarding the product or service we are to advertise.

There is no item to be considered of too small importance at this stage. One small point in which it is superior to or different from competitors can turn the scale in favour of the subject we are to handle.

#### HOW TO ANALYSE PRODUCT APPEAL

The following is a very general guide to analysis. This can be amplified to suit the particular problem in hand. The various headings need be nothing more than a guide to the lines along which to work, especially when writing up the details of commodity or service, as technique and materials vary as the different trades.

It is therefore up to the copywriter to add the necessary detail. If the article is made of the finest cobalt steel, write it down. Do not be content with the generality "best materials obtainable." If it is a micrometer job, the statement "careful and highly skilled workmanship" conveys little. Be definite regarding the degree of accuracy. Should the article show a saving on upkeep, instead of "cheap to run" give, if possible, definite figures.

Question yourself as you run through the analysis. How does the product save the user's time? Where does economy come in? Why is this underclothing cool, warm, or non-chafing? The design is pleasing—why? It is improved—how?

Let us pass on to the suggestion guide. Select some

product with which you are familiar and write down as complete an analysis as you can, avoiding generalities as far as possible and keeping in mind questions to be self-asked: "How?", "Why?", and maybe "Which?", "When?", "Where?", and "Who?"

#### 1. WHAT IS THE COMMODITY OR SERVICE?

Jot down all you know about it in general, together with any facts about selling points which give it an advantage over any competitive lines of similar kind and price. The goods. Any story connected with them? History of evolution of product. Producers. British made?—where? Hand-made. Hand-finished. Mass produced. Improvements incorporated. Any "snags" overcome. Detailed summary of workmanship and materials. Trials and tests. Purity. Cleanliness.

#### 2. THE APPEAL TO THE POCKET

What saving to the prospect in the following items? Initial cost. Expense for labour. Time. Upkeep. Economy in use.

What of durability? What profit or eventual gain? Discount of any kind. Special price offer. Instalment plan.

# 3. THE APPEAL TO THE SENSES

- (a) Touch. Light. Responsive. Balanced. (As in pianos or typewriters.) Delight to the touch. (Complexion and beauty subjects.) Freedom. Absence of constriction. Non-chafing. Soft texture. Warmth. Coolness. Ventilation. Comfort in fit. These items deal with sensations which can arise from body contact as apart from digital touch, and they should be applied to such articles as underclothing, shoes, gloves, hats, collars, etc.
- (b) Smell. Any particular perfume? Delicate. Exotic. Elusive. Charming. Fascinating. Healthful. These sense impressions, of themselves, are very difficult to describe. Analogy will sometimes help. Strive to stir the imagination with such phrases as these: "Cool as a running stream" (St. Julien tobacco). "Fragrant as a June garden." "Refreshing as a breath of sweet country air."
  - (c) Taste. Any particular flavour? Appetising. Nutty.

Creamy. Smooth. Spicy. Piquant. Toasted. Sweet. "Bite." "Tang." "Warmth."

- (d) Hearing (Tone and Sound). Loud. Soft. High. Low. Sweet. Mellow. Ringing. Vibrant. Natural. Variable. Full. Clear. Distinct.
- (e) Sight. Size: Particular range of sizes? Full. Large. Massive. Miniature. Small. Handy. Dainty. Compact. Tall. Broad. Thick. Long.

Design: Pleasing. Improved. New. Tasteful. Thoughtful. Unusual. Simple. Elegant. Impressive. Workmanlike. Artistic.

Colour or Finish: "Hand polished by craftsmen." "Matt Finish." "Five colours from which to choose." "Heavy chromium plating." "Enamel which is fireproof and chip-proof."

Note the selling point in four out of the five examples: "Hand polished by craftsmen." "Heavy chromium." "Fireproof and chip-proof."

### 4. THE APPEAL TO SELF-INTEREST

Self-preservation. Appetite. Fashion. Economy. Financial gain. Greater ease. More leisure. Less labour. Contentment. Health. Pleasure. Pride of possession. Self respect. Self improvement (physical or mental).

Anxiety to win the esteem or even to be the envy of others can sometimes be played upon. Thought on the part of the mother for the health of husband and children, and on the part of the father for the welfare of his family can, in a way, be classed as a type of self-interest.

#### 5. OVERCOMING INSTINCTIVE CAUTION

This attitude of caution towards a new or unfamiliar product can show itself from two angles. (1) The prospect's reasoning that the article advertised is not absolutely necessary to him, therefore his unwillingness to expend money for its purchase. (2) Doubt in the mind of the prospect as to the merit of the product, his ability to instal or work it, or fear of bodily injury or other unpleasant consequences in case of the article "going wrong."

When dealing with a possibility such as the first quoted, we must so frame our copy that it suggests benefits to the prospect that far outweigh thoughts of unwonted and seemingly unnecessary expenditure. We must analyse the article, not only for its usual selling points, but also in order to realize the position of the prospect without our product. Using this analysis it will be easier to convince our reader of self-imposed inconvenience suffered unnecessarily and without reason.

The second possibility should also be considered. Every one of us tries to avoid "buying a pig in a poke." Our copy should be of a persuasive nature—plain, strong, suggestive fact, without the slightest suspicion of exaggerated claims. It must be believed and engender belief in the commodity

on the part of the prospect.

When any thing, or statement, arouses strong desires or fears, e.g. fear of ill-health or insecurity—there is a tendency for us to believe in an offer which will satisfy our desire, or put us on the road to health or security. It must be remembered, however, that in order to be believed, the announcement must be acceptable and credible. Show necessity for the product, stimulate the desire for it, and then, it would seem, we are on the road to breaking down one section of the barrier of caution.

Endeavour to dispel doubts. The following list is simply intended to give an idea how this can be done: "Installed free"; "A child can operate it"; "Nothing to go wrong":

"Thoroughly safe."

Guarantees. Words such as "Warranted," "Guaranteed," or even "Fully Guaranteed" mean—exactly nothing. Give a definite and understandable guarantee, even though for only a short period.

"Satisfaction or money returned," "Sent on seven days' approval," and propositions in similar strain can

assist in fostering faith and routing caution.

Tightness of money brings cautious spending. majority of the buying public are poor. Their eternal question is: "Can I afford it?" Where the purchase price represents a big item to the public addressed, "Terms arranged to suit your pocket" can help overcome caution. Twenty pounds for a radio set as an outright outlay might be a proposition amounting to the ridiculous; but an offer to become the possessor of such a magnificent instrument for the daily outlay of an amount no more than the cost of a packet of cigarettes is an idea which might be seriously considered. The advertiser wins when the desire for possession is uppermost, and outweighs any thought of financial burden which might result from the purchase.

Testimonials are sometimes used, in order to establish confidence and thoughts of reliability. Without going into the pros and cons, it can be said that the main strength of a testimonial lies in its source of origin. The opinion expressed carries most weight when it emanates from an authoritive or expert source.

For instance, the short, pithy sentence of praise from a famous airman or racing motorist, for the fuel and lubricant used during the breaking of a record, certainly carries weight. The reader thinks: "If it's good enough for him, it's surely good enough for me."

On the other hand—supposing an extreme case—a recommendation for a brand of baking powder from a prominent actress or "Society beauty" who, presumably, has been too busily otherwise engaged even to have thought of opening an oven, would have no weight whatever.

All busy housewives are not screen, stage, or society "fans," neither are they the fools that certain self-opinionated writers of advertising take them to be—living in a world, the whole of the inhabitants of which are barmy, excepting the particular brand of writer.

Perhaps, however, such stuff is meant as a joke. If so, it is appreciated in many homes. The idea of baking little rock cakes in the morning, then rolling off in an expensive car in the afternoon appeals to the sense of humour.

Avoid the impossible testimonial, and the far-fetched tarra-diddle style of appeal! Before turning out copy depending on that type of thing, a writer should ask himself: "Would I or my friends and relations, being of sound mind, believe it?" Publication would then mean an affirmative answer and the public could judge of the writer's standard of truth, his belief in fairy tales or even the state of his mind. Boiled down, it amounts to this—give your public credit for the average fund of common sense.

### 6. MAKING AND BREAKING BUYING HABITS

Habit is established by the thinking of a thought or by the performance of an act, in a particular way, repeatedly and without change over a protracted period. Repetition gives habit its roots.

Ask a friend to name, say, the toothpaste which he is in the habit of buying. He will most likely name a well-known brand.

Question him as to why he buys that particular brand, and to be candid with his answer. You will most likely learn that he has come to associate toothpaste with that particular brand through repetition, i.e. through his having seen the name continually in print. Repetition of thought will, in this case, have formed his buying habit. Should he have used a certain brand for years, and then suddenly changed over to another, there will certainly be strong reasons to be ascertained.

Do any of us like to be put out of our routine? "Why should I change?" we ask. We demand reason for change.

In order to break a certain habit, we must offer a more "comfortable" substitute and show our product to be of greater utility—to engender greater desire for our brand than for that habitually bought. We must show reason for change. While we are striving to break the habit of buying a competitive line, we must not forget that it is our job to form a new habit—that of buying the product we have to advertise.

It is a case of repetition once more. We must emphasize and reiterate the brand or trade name until it is remembered automatically.

In many instances, habit, if it can be broken, takes a good deal of breaking. It is like a trench which grows deeper with the march of time. When marketing certain products, especially if revolutionary in design or function, a good motto might be "Catch 'em young."

That which might be rejected by the older and more staid would possibly be received with enthusiasm by the young idea.



Repetition of trade-name as a means of "fixing the brand," thus leading to sales through suggestion, and finally habit. The name "Gibbs" may be seen eight times in this advertisement. The main appeal is to the pocket; it is waste-proof, spill-proof, concentrated-most economical. With a reduction in price there is a double saving. The finishing slogan is an additional "spur" or action impeller.

(See analytical diagram of this advertisement on p. 183.)

YOUR TEETH ARE IVORY CASTLES-Afford them with CIBBS DENTIFRICE

#### CHAPTER III

#### SHAPING THE COPY TO VARIOUS TYPES OF PRODUCT

THE method of approach—Satisfying a "desire"—Commodities classified according to appeal—Seeking the specific selling point—The utility article's appeal—'Ware antagonism—persuade and suggest—How to sell the luxury article—Make the luxury a necessity

Working along the lines suggested in the previous chapter, we amass a large and detailed summary under various heads.

It will be seen that this analysis divides itself into two parts. The first section, taking in headings one to four, includes a summary of the commodity or service, together with appeals to the pocket, to the senses and to self-interest. It includes all the good points embodied in the thing to be advertised, which, from our point of view, should appeal to the prospective buyer.

There is a possibility, however, that certain objections might arise in the mind of the prospect. These objections must be anticipated and countered as far as possible.

The sections on "Overcoming instinctive caution" and "Making and breaking buying habits" are a reminder to the copywriter to consider the attitude of the prospect towards the product. Copy which is written without consideration of this phase of the problem, stands a good chance of missing its mark.

We have our mass of information. It is now our job to select, edit and condense, finally producing a piece of finished copy which will attract, interest, arouse desire, gain confidence, rout caution, bring conviction and spur to action—in brief and with hope, to sell the goods. What is to be the method of approach?

# THE METHOD OF APPROACH

Dealing with human nature, we are up against a strong combination of habits and desires. Speaking generally, we can think of the desire as coming before the habit. These desires can be placed beside the various items shown under the heading "The appeal to self interest." Self-preservation: the desire to escape from danger or to embrace security. Appetite: the desire to eat, drink or otherwise indulge. Fashion: the desire to conform to general practice. Economy: the desire to save. Financial gain: the desire to amass. Ease, comfort, less labour: the desire for creature comfort and leisure. Pleasure: the desire for play or entertainment.

There is also the desire for success, for individuality, to be "top dog" and to have that which few other folks can

possess.

Westward Ho!, as a seaside place, would appeal to the type of person who "wants to be alone," while Blackpool would be ideal for those with a desire for sociability.

No matter what line of approach we take, even though we back our case with a strong appeal to the pocket, it must arouse desire before thoughts of spending can take shape.

#### **SATISFYING A "DESIRE"**

The commodity or service must be looked upon, first and foremost, as a means of satisfying a desire. We must so use that "wish for," playing upon it and reinforcing it, that the reader of the advertisement will come to feel that the only means of satisfaction is by taking advantage of our particular offer.

In the case of such articles as foodstuffs, drinks, clothing, jewellery, confectionery, tobacco, easy chairs, beauty aids, medicines, and the thousand and one things connected with personal need, enjoyment or indulgence, the strongest and most effective main appeal is to one or more of the fundamental desires.

## COMMODITIES CLASSIFIED ACCORDING TO APPEAL

Commodities can be placed into three groups—staples and everyday purchases, articles of utility, and luxuries.

With the first group, we find ourselves dealing, usually, with lines that are up against heavy competition.

We must therefore reinforce our sense appeal with the special advantages of our commodity over competing lines. The majority of products in this group represent

"habit buying" and, therefore, strong attractive reason must be given for change. The brand name should be kept to the fore.

Examples of this can be seen in breakfast foods, which, we are given to understand, are not only appetising and nourishing, but cut down the time of preparation to a few minutes, or else are ready to serve without any preparation whatever. Certain shaving creams multiply themselves in lather a specified number of times, while another preparation enables the shaver to dispense with the brush method altogether.

Consider the various brands of cigarettes. One will not harm the throat, due to elimination of certain harmful matter. Another has a filter tip. Claim is made for one that the paper used in manufacture is the purest rice paper obtainable, while another replies that, after all, the tobacco is the main consideration.

Yet another inexpensive cigarette has lately come in for a vast sale. It is larger than most cigarettes of the same price, but being backed by an old and respected name, there is no suspicion aroused as to inferiority, due to the increase in size. It sold on name; the size helped. Quality maintained kept the sales going.

#### SEEKING THE SPECIFIC SELLING POINT

When looking around for this extra selling point, endeavour to evolve something specific. It is often very difficult, particularly if the firm advertising runs various lines of similar goods under different brand names. Without due care, we might find ourselves, while lauding one line, belittling the rest.

A grocer running various blends of tea might take it into his head to advertise two or three particular blends at the same time. He could single out one of them, and use as his selling point, "The blend is better"—but what does it mean? Better than which?

Presuming that the price of the three blends is the same, the advertiser might argue that a change is as good as a rest, but he should remember at the same time that by means of those words, he has placed his other blends, maybe already established, in a position of inferiority. Far better to say that the particular blend "has a flavour all its own," which would of course be telling the truth, and although general in character, is a statement which carries a certain

amount of inviting suggestion.

A clever appeal to the woman in the housewife, and the housewife in the woman, has been used for Heinz Salad Cream. At the head of the layout a caption read: "Salads put a new complexion on you." Following this, a picture of an attractive young lady in the act of preparing a salad, the picture in a circle, which, in itself, is a geometrical shape carrying attention value. The picture really does duty as a period dash—giving force to the further statement that "Heinz Salad Cream puts a new complexion on salads."

The first caption is an appeal to the desire for beauty, while the second is calculated to draw the home-proud wife who delights to hear words of praise and appreciation of

her appetizing salads.

Salads are cooling, purify the blood, and so are good for the complexion. Heinz Salad Cream is good for the salad. The salad, with such delightful dressing, is good for the appetite. All this is incorporated in the copy, in which points of analysis can be seen—ingredients, sizes, and taste "smooth, subtly seasoned." Here it is—

"The surest, simplest way to a lovely skin—is to eat a salad a day. And the loveliest way to dress a salad is with Heinz Salad Cream. What a dressing! Smooth, subtly seasoned, perfect. Made from new-laid eggs, pure olive oil, and rich cream. Heinz Salad Cream makes a salad a perfectly balanced meal. Be sure you get Heinz. In three sizes: 6d., 10d., and 1s. 1½d."

The appeal is strengthened by the free offer of a salad recipe book—no excuse for "not knowing how." The fact that it is British made is expressed in the words "made in our London kitchens."

"Be sure you get Heinz" is the method of safeguarding against substitution.

One word could, perhaps, be changed with advantage in this piece of copy—the word "perfect." As a suggestion, such words as tasty, tempting, delightful or delicious might have a more definite and direct appeal. Try to think of a still stronger alternative. It will be found instructive—and, at times, by no means easy—to substitute words in the various advertisements met with. The words chosen must, however, be put in the place of others with the idea of strengthening descriptive value, sense imagery or visualization.

In this first group, we are dealing with products that can almost be thought of as an end in themselves. They are intended directly to satisfy personal wants, or play up to personal desires. They "taste nice"; they give bodily ease; they endow with good health; they bring solace; they promise future security; they carry nearer to success.

#### THE UTILITY ARTICLE'S APPEAL

In a second group, we find the means to various ends—articles of utility. These do not depend for consideration on their appeal to the senses or by reason of being the means to a more comfortable *self*. Their selling strength is in what they will do. Efficiency is the keynote of the copy written around them.

We must show that such articles will do a job of work better, with less labour and maybe, with a saving of time and money.

Articles of utility include such items as office furniture, filing systems, working clothes, overalls, footwear for sports, motor vehicles, garden impedimenta, tools of all kinds and labour-saving devices—things of a nature more useful than personal or ornamental.

Specification and reason may be introduced into the copy, in order to demonstrate to the prospect the superiority of the advertised article and the advantages to be enjoyed by possession.

It should be borne in mind that many articles in this group really take the form of tools or instruments, by means of which can be evolved other items capable of gladdening the eye, tickling the palate, delighting the ear, and also of saving money. Examples of these are: Bicycles, which although in themselves cannot be classed as things of beauty, bring the glory of the countryside within cheap

and easy reach. Musical instruments. The inexpensive, compact, cream-making machine for household use, and the Sparklet type of siphon for the home manufacture of mineral waters.

In such cases, we can combine the appeal on the grounds of efficiency—showing how well the product will do the job—with a play on the pleasant consequences following its use. For the creaming machine, a good lead would be: "Pure, rich, delicious cream at a quarter of the usual cost"—an appeal on the self-interest side to appetite and also the pocket. Cream is also a "health" product.

Whatever the line of goods, they must be studied from all angles in order that the strongest method of approach may be arrived at.

A nicely mown lawn is certainly a joy to the eye, but variable cutting height and self-sharpening blades in a lawn mower are of more moment to a prospective buyer. Style does not matter in overalls so much as roomy, well-placed pockets, comfortable fit, and hard-wearing material. Filing cabinets stand or fall on the system which they embody—orderliness and time saved by their use. Specification and reason are called for in these instances. We must show the gain or advantage which comes through ownership.

However we treat it, our copy must absolutely fill the mind of the prospect with one idea to the exclusion of all others—the wish to have or possess. We must aim at putting these words in the mind of the reader of our copy: "This is the thing for me, without question."

#### 'WARE ANTAGONISM—PERSUADE AND SUGGEST

"Without question"! That is what we are up against—question and objection in the mind of the reader. We must therefore think very carefully, trying to realize the checks to the buying idea that are likely to arise. Being wise, we shall obtain as many opinions as possible and then write up to these "checks" and against them, in order that either they do not come forward in the mind of the prospective buyer, or else are countered and neutralized at their inception.

Man is a reasoning animal; reasoning is of the conscious

mind. Avoid antagonism or invitation to competing thought as much as possible. Argument challenges to counter argument. Pure argument must be unassailably strong if used at all. In the long run, it is far better to use talk of a persuasive character. Suggestion is directed towards the subconscious mind—the "I-never-thought-of-that-before" part of the prospect. Suggest a definite line of action; suggest advantage to be gained; tell your reader in a suggestive way, "You can do better with this!" or "Do this now and be glad later on."

Be positive in suggestion. Say: "Do this!"—it is far more definite than "Don't do that."

#### HOW TO SELL THE LUXURY ARTICLE

We now come to the consideration of the luxury group.

What is luxury? Does costliness or lavishness define it? Caviare is considered costly and unnecessary by the poor and so-called ordinary person, who, most likely, would prefer his pair of kippers.

To the rich, it is a "fancy," and the cost, relatively reasonable, is a secondary consideration—just as in the case of the "fancies" of the poor. Appetite says: "I should like . . ." and if the pocket is equal to the desire, the fancied article is bought.

A famous painting by an old master changes hands for tens of thousands of guineas—bought by a millionaire. The world at large judges the price to be "enormous" for an article which is neither a necessity nor a utility. We must, however, view the purchase from the point of view of the buyer. He had the desire for the particular picture. Genuine aesthetic considerations, love of art, pride of possession, notoriety, hope to arouse envy, or even thought of financial gain by means of resale might have been instrumental in prompting the purchase. Desire arises from the need for that which might be termed "a fuller life." Viewed from this angle, it will be appreciated that, to the particular millionaire, that certain picture became a necessity. Luxury is bound up with self-interest. Even though a luxury be bought as a present to another party, the buyer is pleased to give.

Apart from glass-cutting and similar performances, of

what use are diamonds? Certainly they are looked upon by a certain type of person as a kind of good investment, but unlike other securities, they are seldom locked away in safe deposits. They are used simply for *personal* adornment, and maybe, in an effort to look big—create an impression longed for in the imagination of the wearer.

With high-priced articles of a mechanical character, luxury may be termed "refinements." Some of these refinements may certainly be necessary in the make-up of an article which is the most advanced type of its class of goods, in which case the refinement becomes an embodied improvement. Where the refinement is not absolutely necessary to efficient working, its inclusion might, however, appeal to the man who will have what he considers the best, irrespective of cost.

Luxury and extravagance are linked. Thinking of extravagance without excuse for purchase, the prospect will not buy.

Mrs. Jones bought a vacuum cleaner for £15 15s.—or, more correctly, for an outlay of 2s. 6d. per week on hire purchase.

Mrs. Brown thought it unforgivable extravagance until Mrs. Jones called her in to see the machine in operation.

She saw how "spick and span" the carpets and upholstery could be made to look with the aid of this new appliance—far better than she could ever hope to approach with the old brush-and-pan method.

She saw the bag of dust and fluff and grit and grime which the hungry machine had gulped into its interior. She wondered why all the family—she herself, husband, and children—had not been laid up long before, with so much dirt and microbes about.

She saw how quickly it was all done, and how easily. None of the slogging hard work, with dust flying about, thick as a smoke-screen and ready to settle again, long before the brooms were put away. She thought of Jimmy's dirty boots—"you can't always keep them out of the best room"—and Father's tobacco ash—"doesn't worry him." Later, Mrs. Brown thought a little more. After all, what is half a crown a week for a limited period, when compared with the advantages it would buy—a cleaner, brighter

home; a safeguard to health; a machine as good as a daily help?

The unforgivable extravagance had become an unmitigated blessing; a good investment—a necessity!

### MAKE THE LUXURY A NECESSITY

Drawing conclusions from the foregoing examples, it seems that luxury, in the generally accepted sense, ceases to exist from an advertising point of view. With the wish on the part of the prospect sufficiently strong, the luxury becomes a necessity. It is an answer to the demand for "the best," a way to the attainment of heart's desire—and so, eight-hundred-guinea fur coats are sold to women (or their husbands) who have "longed so long" for them, and, in many cases, "have nothing to wear."

In the case of high-priced articles such as "luxury" cars, expensive jewellery and ultra-priced wearing apparel, the buyers will patronize what they have come to regard as "a firm with a name."

The firm is a household word for the particular line of goods—in many cases due to advertising—and their patrons, besides the conviction of having obtained the finest procurable, are pleased to pay for the reflected goodwill of the firm's exclusiveness.

It will be noticed that in all three groups, self-interest and desire pop up in some way or another. It would therefore seem good policy for the copywriter, while remembering the goods, to give a great deal of thought to the appeal to self-interest.

Having dealt with the likely attitude of the prospective buyer towards the various types of product, let us now consider the advertisement itself—how it is made up of various component parts, and what we should aim for it to do.

#### CHAPTER IV

#### THE PRESS ADVERTISEMENT ANALYSED

THE caption—The provocative caption—Alliteration and rhyme—Word play—Association of ideas—Price not always important—Induce action now—The return coupon—The name and address

A Press advertisement may contain the following eight parts although, in some cases, certain of them can be fused together, or dispensed with entirely—

(1) The illustration. (2) The caption or main heading. (3) Sub-heads. (4) The body matter or text. (5) The price. (6) The "spur" or action impeller. (7) Name and

address. (8) The return coupon.

It is sufficient to say of the first that it should be well drawn or, if it is a product of the camera, a good photograph. It must assist in attraction and connect up in a direct manner with the plan of the advertisement, and not simply be given place as a piece of meaningless "pretty-pretty." Startling pictures which bear no direct connexion with the theme of the announcement do nothing more than occupy valuable space. Insist that the illustration carries out the job which you pay for it to do—not only attracts attention, but says something interesting or informative.

## THE CAPTION

One of the most important parts of the advertisement is the caption or main heading. It is the method by which, in conjunction with the illustration, the reader is to be

stopped and led into reading the entire copy.

We have already stressed the fact that it must attract, but as this point is liable to be overlooked or even forgotten, there is no harm done by repetition. It must make a strong impression, arouse curiosity, create a wonder-what-this-is atmosphere, make the reader think—and read on. It must turn the key of the reader's interest and open the door of desire—to know more.

A caption can be presented in several ways. It can be printed as a plain announcement, e.g. the one word

NONSNIFF. In the instance of an unfamiliar product, a single word caption, such as this, would convey nothing to

the prospect. Not understood, it is ignored.

The next type is a statement of fact—NONSNIFF CURES HEAD COLDS. This is definitely superior to the first. It gives some information, makes a definite claim, and stands a chance of attracting many of the nasally soreafflicted.

Remembering, however, that the urge to buy should be worked into the announcement as much as possible, the command or imperative suggestion style of heading would,

perhaps, have a stronger effect.

This "command" caption would read: CURE YOUR HEAD COLD WITH NONSNIFF! It tells the reader to take a definite line of action, and unlike the second example, which seems to suggest that the product will cure at some distant date, when the reader happens to rouse himself sufficiently to think about using it, this command, in itself, suggests speed. Here is Nonsniff, cure your cold!

The ridiculous trade name used to illustrate these three types of caption emphasizes another point always to be borne in mind, i.e. avoid the use of ridicule. A head cold is bad enough of itself. Using it as a butt for fun-making is just piling on agony.

Fun, if used in advertising, must neither embarrass nor

offend.

A fourth method of treatment is in the form of a question. A question usually demands an answer and an answer calls for thought.

There is something more than humour in the caption crowning an announcement for Portland Style-Comfort Shoes—"Are your feet still on your mind?" The very quaintness attracts, and whether the answer be "Nowhy?" or "Yes—what's to do about it?" the copy stands a good chance of a reading.

An insurance company, wishing to make a young "life" pause in the course of happy haymaking and to give a thought to things to come, might use the question, Security now—what of the future?"

"Where the sparrows are canaries" is a statement of fact caption used by the P. & O. Line in advertising their

cruises to the Azores. What an appeal to the imagination! Canaries as common as the London sparrow. Woods of camellia trees. Roads hedged for miles with blue hydrangeas. In paradise, yet still living!

Another "fact" caption which is strong by reason of association with expert opinion: "Doctors choose Humanized Trufood for their own babies." Among mothers, this statement is calculated to create confidence immediately.

The next heading is taken from an advertisement of Westinghouse Electric and appeared in a finely produced American publication.

"From a \$5 bet on a \$1 watch came the pioneer broadcasting station." It tickles the bump of curiosity and

appeals to the average person's love of a tale.

The copy tells of how two engineers made the bet, the challenger contending that his dollar "turnip" would keep better time than his friend's "21-jewel gold-cased model." In order to do the job thoroughly, they installed a wireless receiving set, that they might get the correct time from the Arlington Naval Observatory. The receiving set proved to be a spur to further interest in radio. A transmitter was next installed. Eventually, the dot-and-dash of Morse gave way to voice transmission. A Pittsburg department store, sensing an aid to the sale of a stock of radio receivers, advertised: "Hear those interesting 8XK programs in your own home." Home radio entertainment was on the way—very near. Two months later, the famous station KDKA was on the air—operated by Westinghouse Electric! A clever tale of real life, and well told.

# THE PROVOCATIVE CAPTION

"It's foolish to buy a house." This is from an advertisement for Ideal Central Heating (Ideal Boilers and Radiators Ltd.). On the face of it, this heading seems pointless, but when the circumstances are considered, one must agree that the idea is clever and its originator knew what he was about. Imagine a full page of displayed advertisements, all offering houses for sale. At the bottom of the page, the eye of the reader alights on this caption, so displayed that it is in contrast with the setting of other headings. All the others are urging purchase, while this one says something entirely different. What a shock! What a contrast! Why not buy? What's the reason? The reader is curious and strongly tempted. He reads on and so learns the full strength of things. The caption follows through into the copy, the full assertion being that "It's foolish to buy a house . . . without giving careful consideration to heating." The copywriter then proceeds to show how really foolish it is, when so much depends upon it—warmth, health, comfort and even property. Installation costs are given and it is pointed out that if installed during construction it is much cheaper. Just a small increase on the usual payment to the building society—which is quickly saved, running costs being low.

This last item is meant to bring about a swift and favourable decision. Putting off until later means self-robbery of the pocket, which of course is a foolish practice.

We have shown how the caption can be presented as a plain announcement, a statement of fact, a command or imperative suggestion, and in the form of a question. There is another type, and one which should be avoided, as it is the mark of ignorance of the fundamental principles of advertising. It is the caption which will fit any advertisement, for any product, and therefore, is fit for none of them.

Let us call it the indefinite type. Such headings as "Stop," "Look," "Listen," "Here's value," "Read this," "Who are we?" and "We have the goods" might certainly come under the headings of question, command and announcement, but they convey nothing, they are vague and what is more, useless.

Apart from the four good methods of presentation, there is the question of further special treatment.

# **ALLITERATION AND RHYME**

Alliteration can sometimes be used with good effect, the initial letters of all the words, or the main words of the caption commencing with the same letter of the alphabet. "Have a Happy Healthful Holiday at Harrogate," and "Such a Splendid Shirt for Seven and Six" are examples of alliteration. This method of treatment introduces a lilt or rhythm which can be rather attractive.

Rhyme as well as rhythm may be introduced into a

heading. Rhyme is not only attractive, but it makes remembering easier. Cleverly handled, it will jingle in the brain of the reader for a long while after he has forgotten the publication in which the advertisement appeared, and moreover, it will have a tendency to keep popping up.

It is particularly effective when used in the form of a catch-phrase incorporating the name of the goods, e.g. "Girls and boys love Playbox Toys." These examples are just knocked up offhand, but they will illustrate the point. The following heading might lead the reader into the main copy: "A change from meat when 'beat' by heat"—ninety in the shade—appetite suffers—meat is too much but one must eat something—what's this?

#### WORD PLAY

The wording of a heading can, in favourable circumstances, be given a kind of cheeky twist which will add to its appeal.

A play on a certain word, or repetition of a phrase in reverse are two ways of doing it.

An appeal to the man with a family, cramped up in apartments and paying quite enough rent, could be—"Own your house, and *House* your own." A morning salt or health saline could be offered to the Monday-morning-ish through the medium of the quasi-proverb, "Liver health makes healthy 'liver.'" "You bank on Ewbank" could be offered as good advice to the housewife in need of a carpet sweeper, while the advertiser of a vacuum cleaner could make a negative approach with "Don't dust the floors—floor the dust."

It will be noticed that certain words are set in italic type. In this way the needed emphasis is introduced and the point is not so liable to be missed. The above examples, as far as I know, have not been used. If they have, please blame the other man should they not meet with approval. This type of heading, like those employing rhyme or alliteration, is rather difficult to evolve. If they do not fit into the scheme of things without forcing, it is better to scrap them.

A few points to conclude these notes on the main heading. First, regarding the word "caption." It can be used to



Pamous figures



Produced by Mesers. John Haddon & Co. Ltd.

A play upon the word "figures"—both historical and numerical. Sir Richard Grenville is a figure of historical association with Virginia. Player's No. 3 Virginia is the outcome of 350 years' experience of that most famous of tobacco-growing States. The cigarette leads the eye downwards to further figures—prices for various packings. The illustration, in the style of a woodcut, contrasts with the up-to-date trimness of the modern cigarette, which is pictured in half-tone. Erbar, as body type, lends the modern touch to the message.

indicate the main display line at the head of an advertisement. It can also be applied to descriptive matter belonging to illustrations or diagrams in an article or advertisement. Such pictures or photographs, in the case of an advertisement, usually illustrate certain interesting detail apart from the main illustration and copy.

Call the main display line a caption or main heading, but whatever you call it construct it with the idea of leading the prospect to read the copy. Put yourself in his place and endeavour to think his thoughts. Use the minimum number of words, no more than five if possible, and those of the simplest kind, which will satisfactorily express the idea.

#### ASSOCIATION OF IDEAS

Think of the product, and set in motion the chain of associations, e.g. Soap, cleanliness, health, beauty, Cleopatra, Egypt, palm trees and other connexions along different channels. Tobacco suggests Raleigh, America, Indians and the pipe of peace. Strings of associations can be brought to mind, many of which will be influenced by thought of the product itself, its uses, and materials and method used in its manufacture.

Although, on the face of it, this method might seem a bit peculiar, it will come as a surprise to those who have not tried it—where this chain of thought will lead, and the quite good and at the same time relevant ideas which, suddenly and unexpectedly, are born.

Apart from the foregoing, look to the analytical detail—"Appeal to self-interest," etc., for the seed of an idea.

We have seen that the function of the main headline is to attract attention, not only through its size, but by reason of the interest embodied in the idea it conveys. The heading must be in tune with the illustration. Each must support the other in the expression of a common theme. They must talk in unison and say something relevant to the subject of the advertisement of which they are component parts.

This also applies to the sub-headings. They must help strengthen the theme of the announcement and not simply be display for the sake of display. In a good advertisement, the reader has a summary of the subject in illustration, main heading, sub-headings and nameplate, whereas in a bad piece of work, the sub-headings, instead of helping the message, read like the jabberings of one who is mentally deficient. There must be interest in every sub-heading, and consideration of their other use—to break up a large column of copy into smaller sections—will show the importance of this.

With three sub-headings, we have three separate sections of copy and three possible chances of arousing interest. If we can interest with one sub-heading, the chances are that we shall get a reading for that section, and following this—the appetite whetted—of the whole advertisement.

How often have many of us chosen a book on the strength of one exciting or interesting chapter heading!

Make your sub-headings help the continuity of the story. Let them be quickfire snatches of conversation or information, couched in the minimum number of words, as in the case of the titles of the old silent films. Your sub-headings will then be an asset to the advertisement and not a liability on the space they occupy.

### PRICE NOT ALWAYS IMPORTANT

We will now deal with the price as a component part.

When buying is being thought about, is price always the primary consideration? "Cheap and nasty" is a phrase which is well known, but it can be an impression unsupported by actual knowledge of the goods thus described. In reality, the "cheap and nasty" might be a libel on the product. According to an actual buyer, the description might be, "price considered, good value," or "a good article at an exceptionally low price." We must not blame the man who turns up his nose at that which we know to be good value in a sound, though inexpensive article. Low price can frighten if reasons for it are not given, such as price made possible by mass production, clearance for renewal of stock, time-limit advertising offer, or special line to meet a popular demand.

There are instances when price need not be included, as when quality or reliability are the paramount considerations, or when advertising to the wealthy section of the community.

When dealing with the average poor person, high price displayed can give rise to "second thoughts" and consequent refusal further to consider the proposition. It is better to encourage the reader to send for "an interesting booklet," through the medium of which we can interest him still further, and strengthen his desire for possession to such an extent that price consideration becomes of secondary importance. In such cases—for example, a rather expensive set of books—we often omit the full purchase price, but include the figure for payment by instalments.

The position of the price component in an advertisement is usually after the selling copy, but it can be used as part of the main heading. "Three pounds buys this greenhouse" and "Make baby happy for 2s. 6d" are examples.

The price can also be included in the action impeller, when the goods are to be sold direct, e.g. "Price goes up on the 5th—send 2s. 6d. now and save 1s."

Finally, remember that the price can be a source of economy; it can make the article inexpensive but never cheap. "Cheap" is catching, and might spread, by association, to the product. Talk "The Goods" and their worth, thereby making your copy justify the product and its price. Given a good line, tell its tale well and truly, but in most cases, leave the words "How reasonable" for the reader's utterance.

An advertisement might be most attractive in layout and theme, the well-written, convincing and faith-inspiring copy might arouse strong desire, but unless many interested readers are turned into buyers, even the technically perfect announcement will be of little use to the man who foots the bill.

A flesh-and-blood salesman, having enlarged on the desirability of the article which it is his job to sell, does not break off abruptly with, "That is all, ladies and gentlemen—good day!"

He catches us in "a good mind," produces an order form, and finally, firmly but politely offers the loan of his fountain pen.

With our printed salesmanship, we lack the advantage of personal contact. Our copy having been read, our selling

talk is finished. Not for us the extra persuasion backed by personality, the fresh line of approach or the considerate offer of our gold-mounted pen.

The best we can do is to say "Action please!" as strongly and attractively as is possible in print. For this, we introduce into the advertisement the "spur" or action impeller. This spur must tell the prospect, in a definite manner, to do a certain thing or to act in a certain way. It might, according to circumstances, urge him to "Send a postcard for a generous free sample" or "Write at once for The Garden-lover's Handbook."

When immediate sale is the aim, it will tell the prospect the source of supply—through a retailer or by sending direct.

In the layout, the usual position of this component is, as the final display line before the name and address, or as a finish to the body matter of the copy. It can, however, as in the case of the price, appear as a main heading, e.g. "Free book Standard Roses—make sure, send now!"

### INDUCE ACTION NOW

Urgency is the keynote of the action impeller—now—at once—without delay—to-day! All idea of procrastination, to-morrow, later, by and by or some other time must be swept out of the mind of the reader of our message. We can give a reason for the necessity of quick reply, an advantage to be gained by prompt response, or touch a human chord as in this example: "Buy Cherub to-day—baby will coo his thanks."

We can use simple suggestion such as, "Your grocer strives to please—he stocks Flavo" or "Let Cleanwell work for you to-day," but it might be thought that this lacks the spur to definite action.

Use of the direct command is certainly more definite, as will be seen from the following examples: "Write Flavo in your shopping list—now." "Your chemist stocks Oralsan. Insist on it." "Send p.o. 3s. 6d. now and save 1s. 6d." Here is another, which takes the form of an inviting suggestion followed by a persuasive command: Sardinettes for tea! Give the family a treat!"

Variation may be given to the action impeller by the

exercise of a little thought and imagination, but keep in mind the method of supply.

#### THE RETURN COUPON

Apart from the spur or action impeller as an urge to immediate buying, or as an invitation to send for free sample or booklet, the return coupon may be considered as an effective means of impelling action. Where space admits of its inclusion without cramping, it is useful in several ways. An advertisement which includes a return coupon will attract owing to its contrast with other advertisements in which a coupon is not embodied. The coupon itself has attention value, particularly if it is surrounded by a bold border, is a circle enclosed in a square, or takes the form of a right-angle triangle. The geometrical shape, in itself, attracts.

The return coupon is looked upon by some readers as a "ticket of admission." It obviates the writing of a letter and makes the task of answering easier. It suggests immediate action—send the coupon before it is lost or forgotten. It offers a method, to the advertiser, of keying replies—certain letters, words or figures indicating the publication from which the coupon has been detached.

When a coupon is to be included, it should be placed in a position from which it can easily be removed, i.e. towards the outer edge or corner of the page. Adequate space must be allowed for the necessary writing, and when the paper is very absorbent, the instruction "Write plainly in pencil" might be advisable.

## THE NAME AND ADDRESS

As the final item displayed apart from the main copy, the name and address now comes in for consideration. It is not merely a matter of always placing the essential information at the bottom of the advertisement and in a large enough type to "drive out" the space. Many instances can be seen where the name and address has been over-displayed, to the detriment of the advertisement as a whole—where the bottom of the layout has been made the main attraction.

Prominence of the name depends upon whether we are advertising the goods or the firm. In the case of departmental stores and other well-known firms, the name, having become a kind of institution, carries a considerable amount of goodwill. The large store is the Mecca of the bargain hunter, and to some women is as much a place of entertainment as the London Coliseum.

What's on at the Coliseum? What's going at Barkers, Harrods or Selfridges? Show them the name as a main heading and you automatically draw them to peruse the items following in the "programme." Such large firms have advertised for confidence in the service they offer. They have obtained this goodwill, their names are household words, their premises are landmarks, and so they are able to use their name at the head of their advertisements, not only giving it further publicity, but using it in the manner of a guarantee of quality for the goods advertised beneath it.

With such advertisements, the firm is known to a large proportion of readers. The name being a signal of sound value or likely bargains, the search commences. In the case of an advertisement for a single product, the process is reversed.

The proposition must sufficiently interest the reader before he will trouble about the name and address of the firm advertising. For this reason, it is not necessary, in the usual way, to display the name and address in a very strong manner. Should the prospect need it, he will find it, without our forcing it under his nose and at the same time making it a counter-attraction to something else of more immediate importance—maybe the brand-name of the goods.

#### CHAPTER V

#### VARIETIES OF COPY APPEAL

What type of appeal to use—Dialogue copy—Topical copy—Personal copy—Humour—The character style—The testimonial and the editorial styles—How much to write—Long copy will be read when——?—Suggestion copy—The business end—Keep interest alive—The language of advertisement—Comparison and analogy for vividness—Conveying exact meaning—Avoid belittling comparisons—Cartoon ads.—A caution against copying—Booklet copy—Leaflets and circulars—To sum up

UP to now, we have been dealing with advertisements in general—the various methods of presenting the main heading, the reasons for including sub-headings, the desirability or otherwise of the inclusion of price, the urgent keynote of the "spur" or action impeller, the uses and advantages of the return coupon, together with the question of prominence of the firm's name.

The price can be used as a heading, the heading can take the form of an action impeller and the action impeller can contain the price.

We have seen that the appeal can feature the goods, telling of their origin, their story, and what they are, tracing their history from the time they were a Congo coco-nut to their emergence as a complexion conserving commodity. Human endeavour, delicate process, intricate machinery, tests and analyses can all be made use of in this type of appeal.

Our line of approach can also deal with the finished product, its improvements, its advantages, the ease it brings, its economy and convenience in use, the number of uses to which it can be put, as well as its appeal to the senses, and perhaps simplicity of working and installation.

The appeal to the pocket is another possible theme, which includes value for money, initial saving, advantageous terms, comfortable instalment payments, lasting wear, and "after service" free or at a nominal fee.

We have also seen that everyday purchases are mostly for the satisfaction of personal needs, and that particular brands are usually bought as the result of habit. With such products, we must give reason for change, parade the advantages of our product over competing lines, and keep the brand-name to the fore.

Dealing with utilities, we realized that their selling strength lies in what they will do, and for this reason we must show the points of superiority in the article and the advantages gained by possession, specification and "reason why" backing the appeal.

It was pointed out at the same time how certain of these products are in the nature of tools, the employment of which enables the user to evolve a further something which can have a use of its own, or else have an appeal to the senses.

Luxuries were shown to be necessities from the point of view of the person with sufficient desire for possession, and that their main appeal is to self-interest.

### WHAT TYPE OF APPEAL TO USE

We have a product to advertise. Headlines and copy cannot be written until we have decided upon our line of approach. What type of appeal shall we use?

Consideration must not only be given to the goods alone, but also to the type of person who is the most likely buyer. A group or class must be aimed at, but before we commence our aiming, we must consider its habits, likely wants and the capacity of its pocket.

Is price, durability, or the offer of easy terms most likely to appeal? Very likely, if for example, the offer happens to be a pair of strong boots intended for the artisan at work, or tailoring for the not-too-well-off, purchasable on the instalment plan.

Apart from initial cost, a product can be capable of saving money in the long run, but there is no need to stress "money" in every case. For instance: a top notch petrol will cut out a lot of engine noise and reduce carbon to a minimum. Due to the amount of research put into it, and the impurities extracted from it when in the raw, it gives the engine a longer and stronger life. "Thereby hangs a tale"—the tale of that particular petrol.

This will give sufficient outline to show how the appeal must be tuned to the strongest requirements likely to be asked of the product by the prospect. His convenience, point of view, and his pocket must be the primary considerations.

Having selected the method of appeal, the style or vein in which the copy is to be written must be decided upon. The decision will again depend upon the product to be advertised, the type of prospective buyer, and the media in which the advertisement is to appear.

The Informative style will describe the goods, what they are or what they do, giving particulars of special characteristics and playing upon their desirability. It can be just plain description presented in an inviting manner, or may be treated in the form of an interesting story. In either case, care should be taken that detail be made very clear and simple, vagueness and double meaning being guarded against.

#### DIALOGUE COPY

Copy presented as Dialogue should be what the name implies—a conversation between two people. Two live persons must be made to talk sense and to use a natural manner of expression. The goods can be the subject, or the chain of conversation can be made to lead up to the goods. This type of copy must be well written or left severely alone. It must not be reminiscent of Little Pansy saying her piece at a birthday party, or include a character who is capable of answering only in monosyllables. If detail of the commodity is to be introduced, bring it in with the natural course of conversation without the accompaniment of ridiculous gush.

Ability to write dialogue copy comes as the result of thought, imagination and by keeping a good ear open. The parties to the dialogue should not be made to remark or reply just for the sake of filling space. Make your live persons exchange experiences, agree on the subject of the goods advertised, or offer advice, one to the other.

A while ago, I happened to overhear part of a conversation between two housewives, which commenced like this: "Let other people say what they like—I think that Lux can't be beaten for washing the delicate things. It might cost a little more, but it makes woollens like a lovely soft fleece." "Don't I know!" replied the other lady. "I had an embroidered silk scarf which belonged to Grandmother—a bit worse for wear—and that dirty! Thought it might fall to pieces in the wash, but Lux brought it up lovely. I tried some of X's soap flakes for Jim's pants and vest—never again—you should have seen them!" etc.

Rather long-drawn-out, perhaps; but here was the material such as should be embodied in Dialogue copy. Just natural, normal, homely speech.

### TOPICAL COPY

The Boat Race, heat waves, a solar eclipse, fastest times, record flights and similar news, is an opportunity for the advertiser who can make the tale of his product run side by side with an item in the calender or an event making popular news interest.

For a certain make of motor-cycle to win the race for the Tourist Trophy is a recommendation for the machine and a chance for its makers to advertise it in the Topical style.

Heat waves make a thirsty public, and therefore we are not surprised, when our thirst has been extra expensive, to learn from a Topical advertisement that all records have been broken—for shade temperature, and also for the sale of "'Lime-o'—the drink that makes thirst a pleasure." Even our traditional tea might hitch on to the topical with the challenge, "Whatever they do at Wembley, Chindo Tea is the *Cup* that *Cheers*."

The Topical style must either link up directly with the goods advertised, or find a good "hook" on the particular topic to which the goods might be "attached." For instance, during an election, if nothing better can be found as a connexion of goods with event than "Bunko Beans and Pork elected unopposed," the topical style would be better left alone. Such stuff is just dull and a waste of space that might be better employed.

### PERSONAL COPY

Copy in the Personal style is similar to the Dialogue in so far that both should be written in a conversational manner, but there is a difference between them.

Dialogue copy is really a "report" of a conversation

which is to be read by the prospect in the position of third party.

With Personal copy there are two persons involved in a one-sided talk—the writer and the reader. "I"—either the advertiser or the character in the advertisement—am

talking to "You," the reader.

"I" can hold the entire stage while recounting personal experience relating to the product. "You" can be reminded of inconveniences and their remedies, and be the butt of questions, such as, "Do you realize?" or "Are you satisfied?" In any case, "You require" is the main plank of the personal address. The first and second personal pronouns can also work together in the same piece of copy, which must be friendly, natural, but never patronizing.

#### HUMOUR

Good fun is one of the salts of life. The Humorous style can be very effective, if it does not tend to cheapen the commodity; this is a matter of judgment and common sense. One would not—as an extreme instance—mix up the selling talk for an expensive car with the humour of Tin Lizzie rattlings or a Harry Tate sketch.

If, through the medium of fun, a selling point can be pressed home, it is all to the good. The situation, however, must be *really* humorous but not all joke and no product. Aim for fun without vulgarity, and never touch upon that which might be a sore point with certain sections or even individuals.

# THE CHARACTER STYLE

Certain advertisements running in series embody a "star turn," which, owing to its repeated appearance in various situations, becomes a recognizable and likeable feature of the particular advertisement. This is known as the Character style, and these characters, if cleverly evolved, can come to be looked upon almost as living persons. Examples of Character advertising are the Bisto Kids, for ever following a pie or a stew, Johnny Walker "still going strong," and the Ivory Castles of Gibbs Dentifrice, with the Good Fairies and the Demon Decay. A combination

of the Character and the Humorous is Mister Sherlock Therm, with his dogs "Waste Not" and "Want Not," tracking down that arch-criminal Demon Foodwaste, and incidentally advertising the Electrolux Gas Refrigerator. In spite of the humorous introduction, the copy is not lacking in real selling talk.

### THE TESTIMONIAL AND THE EDITORIAL STYLES

Next, the Testimonial style. This type of copy strives to convince of the reliability of the product through the opinions of personages who are in the public eye or high in society. Peeresses extol certain complexion creams, film stars put in a good word for soaps which have been kind to their skins and have saved their silk stockings, while the crack airman tells us that had there been a better petrol, so-and-so firm would have produced it, and he would certainly have used it. In this style of copy, expert opinion carries weight.

The last to be dealt with, apart from the Technical style, which is a job for the specialist, is the Editorial mode. This is written in the style of the ordinary news, advertisement being introduced in a subtle manner. Among the ways of treating this style of copy is the tale or discussion, based on a subject of interest, and into which the product is neatly woven; also "the writer on his travels"—the discovery he has lately made—the product—or how it came in extremely useful at a rather awkward moment.

# HOW MUCH TO WRITE

The next consideration is the amount of copy to be written. This depends upon the product, the size of space, and the class of advertisement.

The General Publicity advertisement is simply reminder copy with perhaps a few words accompanying the name of the goods—an already well-known line. The present day tendency, however, is to use the space not only to display the name, but also to say something interesting.

The Mail-order class is usually a small-space advertisement carrying a large amount of copy. They are the "bargain basements" and "cut-price shops" of advertising, and in many papers are displayed together under the title of "The Bargain Page." Associated with the idea of bargain, they get a reading despite the large amount of copy pressed into small space.

The actual Small Space advertisement can, of course, use general publicity style, but in many cases a small amount of additional copy of a persuasive nature is used without the display suffering. Such small space advertisements can be seen in the "ear" positions, i.e. in the top corners, either side of the title, on the front page of the large daily papers.

The announcement of the Departmental Store is something more than a section of a catalogue presented in a newspaper. It is a display of bargains, but also news from a particularly favourite house. Copy under the various headings, although crisp and to the point, must be real selling talk, containing, if need be, reason for low prices and insistence on the necessity to "act quickly and be lucky."

Dealing with the so-called Educational type of advertisement, we must consider the circumstances under which protracted copy is likely to be read. Each of us has certain likes and dislikes, along with hobbies in which we are bound up, and goals which it is our ambition to attain. If wireless interests us, we will read anything appertaining to it which is put before us, providing of course that it is presented in an attractive manner.

## LONG COPY WILL BE READ WHEN ----?

Think of your own special and particular interest: the improvements you would like to see, the snags that you wish could be overcome. You will then appreciate and agree that long and detailed copy carrying interest or special appeal, e.g. "How to prevent 'black spot' in roses," will be scanned from top to bottom by most persons interested in the subject dealt with. The copy attracts because it is in tune with an "interest." It couples interest with actual facts, and is read for information—in the hope of adding knowledge to that already possessed.

Long copy might be necessary when writing for products of the technical or utility type, where explanation and education are indicated, also in the case of "everyday" lines, where "reason why" must be used in order to overcome competition.

### SUGGESTION COPY

Protracted copy is not generally needed when the appeal depends upon suggestion alone. In this case it is a matter of whetting the appetite, stirring the imagination, arousing the desire, doing it quickly, and leaving the prospect to think. Too much abstract "influence" can become wearisome. Short and strong is, in most cases, better than long and weak.

Imagine a chap "tied to the job." A workmate walks in, and playfully taunts him: "Phew! A swelterer to-day, Bill!—Just had a pint at the 'Bull'; grand beer; lovely white head; full of sparkling bubbles; ice cold; fair rolled down in one breath—Bet you're thirsty!"

Once he is free, Bill takes the tip. Stopping where it did, the banter was not only good fun, but sensible suggestion, whereas a few more words might have bored Bill stiff and tempted him to consign the speaker to a place several degrees hotter than the day.

The size of the space is decided upon, and it is up to the copywriter to put his best pen forward. Selling talk for one particular product is needed—not the type of writing which will fit a picture of anything in the wide world. Strive to create impressions; put forward ideas for your reader to augment by association; make use of analogy.

Describe a food product as something which is a tempting joy to be eaten, making your readers' mouths water in the process—honeyed, sweet, luscious, creamy, crisp, crunchy, mellow and smooth writing, garnished with golden "chips" of imaginative taste.

Write as much as you like in the first instance, condensing and crystallizing afterwards. Imagining yourself as a salesman, "report" your own sales talk for the reading of a representative somebody who stands for the class of likely buyer. Marshal your selling points in logical order and do not attempt to cram too much information into one announcement.

If the product embodies a real improvement in design or principle, do not be content with a plain statement of the fact.

To "call a spade a spade" is quite good in its way—if we remember that there are spades and spades. "Here is a fine spade of greatly improved design" might be the truth, but, on the other hand, it might not do full justice to a product of thought, experience or genius. If you have a king of spades, parade his virtues. Tell of the new design in the handle, so constructed of a particular material that not only does it afford a better and more comfortable grip, but obviates hand blisters. Show how, on the same principle as the curved sole of a football boot, the blade is so shaped that it reduces clogging and sticking to a minimum.

#### THE BUSINESS END

Be clear and definite in description—"as plain as a pikestaff"—but remember that the business end to be tacked on to the plainness is the point—the selling point. Think of selling points as advantages; advantages possessed by the product over competing lines, and the benefit of those advantages to the prospective buyer.

In dealing with qualities in a product, the selling points are of an abstract character. We are unable directly to describe them, and so we use analogy. Let us take an imaginary example of four selling points of "Virginia Venus Tobacco." It is cool smoking, sweet smelling, the quality is maintained and the price is reasonable.

How cool? How sweet? We can only describe in terms of something else—as "this" or like "that." Working along these lines, we evolve something after this style—

"Freshly cool as a spring breeze; sweetly fragrant as an old English garden; trusty and unchanging as a good friend; inexpensive for such rarity—like 'the best of wives.' Such is Virginia Venus Tobacco—sheer joy for a shilling an ounce."

In the example, the plain adjectives have been replaced by adjectival phrases. "Cool" has become "freshly cool as a spring breeze" and "dependable" is expressed by "trusty and unchanging as a good friend." Reversal of the process will sometimes be found useful when condensing copy to workable proportions. It might be possible to replace a phrase by one or two words. Never do this, however, if it means sacrificing strength, meaning or vividness—far better in that case to re-model parts of the copy which do not seek to describe or impress; or even to cut some of it out entirely. Pruning can sometimes strengthen, and it is surprising the amount of cutting that can be carried out at times, without detriment—often with gain.

It was mentioned above that the selling points should be marshalled into logical order. There is a further point to consider when we do this. Having gained the attention and roused the interest, we must hold the reader until the tale is told.

### KEEP INTEREST ALIVE

Good copy is like a variety poster—the star turns "top" and "foot" the bill. Interest must be maintained by opening our copy with a point which is most likely to be of strong concern and influence. The reader must be humoured. A long opening paragraph is liable to be uninviting, therefore make it short and telling. It is in fact, a good practice to keep sentences and paragraphs on the short side right through the copy.

As the copy progresses, keep the interest alive and do not allow it to fizzle out at the end. A strong finish is as necessary as a good start. Save a powerful point for the last section, which should carry, without bombast, a tone which suggests: "We've told you some, but not all—listen to this!" It's just a bit of technique of showmanship and salesmanship—the bit up the sleeve. Having "listened" and (we hope) been duly impressed, the prospect will be more likely to jump to the word of command—"Action!"

# THE LANGUAGE OF ADVERTISEMENT

We now come to the question as to the kind of language which should be used. The best advice to give and the finest motto to follow is—use plain, simple and unaffected English.

At one time, writing was considered bad unless it was very, very "naice"—full of Victorian so-called dignity, and not a little pompousness. An advertisement need not lack "tone" although the keynote for the copywriter is—be natural.

Use good conversational English which will be understood by the majority of readers. Long and difficult words do nothing more than occupy valuable space, take up longer reading time, and fog those who do not understand their meaning. The trotting out of big words, especially if not understood by many of the audience is, far from being a sign of culture or learning, really a type of ignorance and ill-bred snobbery. Leave these jaw-breakers to bores who are anxious to magnify their self-importance, and to politicians, for bluffing purposes, when uncertain of their ground.

What is the point in writing: "This is the domiciliary edifice erected by John" or "Diminutive John Horner sat in a mural intersection, masticating Yuletide pastry," when we mean merely to say: "This is the house that Jack built" or "Little Jack Horner sat in a corner, eating a Christmas pie"? Judged from every point of view, which is the better mode? Just imagine a son of the people saying to his friend: "Say Bill, I'm in a bit of a mural intersection—lend me a quid until Monday." Ridiculous, perhaps, but stuff almost as silly has appeared in the guise of an advertisement more than once, and in all seriousness. For the sake of using a difficult word, understood by a few, a whole sentence has been lost to the many.

Words are simply symbols, through the medium of which we strive to convey ideas. They must be chosen not only for easy understanding, but on account of their descriptive strength and the vividness of impression that they are capable of making upon the imagination of the reader. Plain description can be interspersed with comparisons, implications and inferences.

We speak of a fierce glare; grateful, caressing warmth; a flood of light and a cascade of sound. By means of words which appeal most strongly to the imagination, we help our description of things which otherwise are difficult to describe.

Impressions which come to us through the sense of hearing can be imitated as nearly as possible and put into words. Examples of these "sound" words are—rattle, fizz, squeak, smack, thud, crackle and roar.

To say that a racing car passed at a very high rate of

speed might be a plain statement embodying the truth, but a more vivid picture would be conjured up by describing it thus: "The great car screamed past—like a roaring devil chased by a tearing hurricane."

Here we have the sound of the car itself, the noise of its progress, and an impression of the following draught of wind.

### COMPARISON AND ANALOGY FOR VIVIDNESS

Comparison or analogy can be used in order to impart vividness to description and to stir the imagination. A good example might be taken from Lady Macfarren's translation of the famous aria "O Star of Eve." The opening words—"Like death's dark shadow, night her gloom extendeth"—convey a wealth of meaning to the idea of night.

The soldier of Shakespeare's "Seven Ages of Man" is "bearded like the pard" and does not seek empty honour, vainglory, or short-lived renown, but "the bubble reputation"—puffed out large—pop—finished!

In A Christmas Carol, by Charles Dickens, the pudding is described as being "like a speckled cannon ball, so hard and firm."

As far as shape and adornment go, this is fine description, but, from an advertising point of view, the analogy fails. One would not associate a palatable duff with firmness, hardness and cannon balls.

In The Cricket on the Hearth, Dickens turns a happy little idea when he describes the boiling kettle as sending out "his fireside song of comfort." Old Scrooge's turkey was a big bird, but the immortal Charles is not satisfied with simply saying so. This is the manner in which he brings us to realize its outsize proportions—"He never could have stood upon his legs, that bird. He would have snapped 'em short off in a minute, like sticks of sealing wax."

The size is suggested by inference—a bird so heavy that his legs would not even trouble to bend. To stand upon them meant just a clean snap, like—sealing wax.

Note the word "like" in the examples quoted. The answer to the oft-asked question "What is it like?" might

be simple, yet attractive description or even specification. On the other hand, circumstances might dictate an appeal to the imagination. In that case, compare the product's similarity in appearance, performance, working principle and effect, with some other well-known thing or function, and use the comparison to strengthen the impression of the word picture.

### CONVEYING EXACT MEANING

The next point to which very careful attention should be given is the matter of making sure that we convey our exact meaning.

It is uncomfortably easy to write a sentence and to find, on reading it over later, that it is vague, pointless, or even conveys an idea which is not intended.

It is not suggested that the thoughtful writer will turn out an extreme and glaring example such as the following: "For sale, a motor car belonging to a lady going abroad in good running order and handsome coachwork," but it is really easy to slip up, especially in a complex sentence.

Every piece of copy should be read through carefully, being subjected to the severest criticism. If this be done, there will be little likelihood of the turning out of an effort similar to the following, which, although slightly altered in wording—that of the actual advertisement was just as bad—conveys the "meaning" of the original. Here is the gem: "Rheumatic pains? It's your kidneys! Get rid of them with ——." Can a human being live, rheumatic pains or no, without at least one kidney? In any case, it is calculated not only to bring on complications, but to form, in certain subjects, a strong anti-publicity complex.

## AVOID BELITTLING COMPARISONS

Write up the goods on their merits and do not seek an unfair advantage by descending to belittling competing lines. Such a practice is like hitting below the belt. Let us play fair with those who are in the "ring" with us—not only for the sake of our self-respect and the good opinion of our readers, but that we may not receive a well-deserved kick in the pants, which is the likely reward of those who adopt "all in" methods.

Do not make a practice of using boasts and exaggerations, such as Best, Better than, Finest, Perfect, and the rest of the sky pinnacles which are without foundation, empty of any provable meaning, and can be used by any huckster and quack. Proof of "good" must always carry more weight than unsupported claim of "better" and "best." In this world, "perfect" is either simply ridiculous or a form of affectation.

It is far better to offer the goods in a tone which implies that honest quality is its own trumpeter, that the opinion of others of experience bears out our faith in our product, and that we leave the verdict to the reader.

Without making extravagant claims regarding durability, the buyer can be given confidence in the prospect of unusually long life for his purchase. If extra durability is a strong point, reason can be put forward to back the claim, e.g. science marches on—no doubt, at some future time, we shall be in a position to offer even better—but at present, this is our ultimate—the result of high standards of research and skill—research which has brought greater durability to the product, just as the march of medical science has brought a greater expectation of life to civilized humanity.

Finally comes a plea for originality in theme and idea. It has been said that "fashions" in advertising technique come and go.

Should we call it fashion or slavish copying of tone and style—following the lead of somebody else, like a woolly lamb tailing its dam?

The "soloists" have only to strike up a new lay, to bring up the chorus in full song. This is not only detrimental to the "composing" powers of these canon singers or followers, but it has the effect of making the original solo artists almost members of the chorus.

# CARTOON ADS.

The cartoon style of advertisement is having an extensive vogue. It is a style which must be very well done or left alone.

Some good and interesting work has been put before us by several of the large advertisers, and the attractive manner in which this has been handled by men who know its possibilities and limitations, has proved a temptation to others not quite so skilful.

This type of advertisement is usually in the dialogue style, but it is often presented in the multitude manner, with all the characters yelling out together—the honour of the first "hearing" being left, apparently, to the choice of the reader. The conversation is enclosed in "balloons" attached to the mouths of the speakers—following a manner which, for years, has been the distinguishing mark of the comic paper.

No doubt this style has paid some people, but the point to bear in mind is that there can be too much of one thing. Where everybody is the same, nobody is different. Lack of contrast lowers attention value, and when novelty has worn off and the public come to know what kind of thing to expect, familiarity is liable to breed contempt.

Before using this cartoon style, be sure it is suited to the product. Do not use it—or any other vogue—simply because "everybody's doing it." So-called fashions arrive and depart, but principles remain unchanged.

Is it correct to use the style under discussion for a product appealing to refinement and artistic taste? Such advertisements have very often appeared. In one particular instance, the drawings were grotesque, the copy inane, the layout disgusting and the whole lot, taken together, a confused mass of brain-addling boost.

Three generally accepted principles are—we must appeal to a class, write for its particular mentality, and present it with a layout which will "reflect" the product.

Believing in these three principles, and considering the product as appealing to a refined and artistic public, many, seeing the specimen described, would readily agree that the "atmosphere" created was sufficient to suffocate any product.

# A CAUTION AGAINST COPYING

Slavish copying sometimes extends to the basic idea. It only requires the appearance of a well evolved advertisement telling of a general state of "Sun-want" or "Blood-hunger" to bring about a string of other "wants" and "hungers."

Besides being a matter of gross "Idea-poverty," does this practice of follow-my-leader really pay? When the particular idea is first evolved, it makes an impression on the reader—if it is really clever and at the same time credible. When the advertising is extensive, the reader comes to couple the idea with the advertiser. As an example, "Night Starvation" is coupled with Horlick's Malted Milk.

The point to consider now, is—in the long run, do the copyists really do themselves any good? When such copying is met with, there is a tendency for these povertys, hungers, impoverishments and exhaustions to give additional and free advertisement to the originator—if the first impression made by his advertisements was strong enough to couple idea and product, and if repetition of announcements be frequent and recent.

Established slogans or catch-phrases have been known to be adapted; the idea has appealed and no other consideration has seemed to have entered the head of the paraphraser.

One particularly glaring case is known to the writer, but as it cannot very well be quoted, invention must be used to illustrate the point. Imagine the proprietors of a breakfast food, working along the lines of "healthy, wealthy and wise" and striving to suggest reasonable price in the small compass of a rhyming slogan.

The effort—"If you're wise, though lacking wealth, Kwik-Weet breakfasts bring you health"—is well advertised and becomes established. Along comes somebody else with the "variation"—otherwise repetition of all in the slogan barring the name of the goods, which is substituted by the name of their own product.

It will be realized that this simply amounts to an empty echo, directing attention to the original "sound." It is a double reflection—of the original advertisement, and on the lack of individual thought and inventive ability in the copyist.

Motto: Hands off the work of other people, and be original by following the other chap's lead—think it out, so that you can say honestly and without fear of contradiction, "He who copies this, copies mine."

#### BOOKLET COPY

In the case of a booklet we certainly have more space to fill—from eight pages upwards, in multiples of four—but the principle of the copy is the same, i.e. to interest, convince and spur to action.

Our booklet can be thought of as the goods on trial in the abstract, a personal interview, or a descriptive demonstration. With so much more space at our command, we are able to write up the goods far more fully, but we must be sure it is the goods and not padding.

We should bear in mind that the job of the booklet is to sell the product to a certain class of people, and that the points of appeal must be so arranged that the selling talk goes on smoothly from strength to strength. The tale of the product may be augmented by more minute explanation and illustration of improvements, details of mechanism and of the article in use. As in the case of the Press advertisement, the handling depends upon the product and the method of approach. All copy must betray enthusiasm, but it must be a sincere enthusiasm over the goods and not a transparent "buy, buy, buy."

## LEAFLETS AND CIRCULARS

The leaflet, with its single printed page, and the circular of two, four or more pages, follow the lines of the booklet—selling talk—but in more condensed form. They are intended for rapid reading by a hurrying public—the quick-fire with good and concentrated aim which is needed for a moving target.

For whatever the copy is to be written, consider the circumstances under which it is likely to be read and the time likely to be at the disposal of the reader.

## TO SUM UP

Summing up this chapter, we have headlines, subheadings and text or body matter with which to get our message over. We have discussed mostly the form of the press advertisement, but whatever vehicle we happen to be using, good copy should be writing calculated to arouse desire and to bring about sales. There should be no thought on the part of the copywriter of either playing to the gallery, pandering to the "refained" or fishing for compliments on the strength of real or imagined literary genius. The man who foots the bill is not looking for sections of a six volume dictionary in his advertisements—his judgment of the copywriter's eleverness will be based on results.

Good copy is selling copy, and the only other consideration is the space at the copywriter's disposal.

Lastly, compel attention through interest at all times. Advertisements are like human beings, in that good turnout and striking features enhance their attractiveness, making them outstanding in a crowd.

Make a collection of really fine Press advertisements and advertising print. It will be found good and instructive amusement to analyse each piece—why it attracts, its style of appeal, the when and where of its appearance, and how a certain vivid word picture in the copy is evolved, at the same time endeavouring to trace the idea at the back of the advertisement to its source.

Attach your comments to each exceptional piece as it comes to hand, and store your specimens in a safe place. They, with their captions, will serve as food for thought at a later date, and as an inspiration—not a model for copying—for future work.

Criticism? Yes, we may criticize in a constructive spirit, keeping our opinions to ourselves when it comes to the work of the other man.

After all, from the progressive point of view, we all make mistakes at some time or another—otherwise we would never make anything. Let us reap benefit from the lapses of the other man, and then—criticize our own work—unmercifully!

#### CHAPTER VI

THE TITLE, COAT OF ARMS, AND MOTTO OF THE PRODUCT

THE Trade Marks Acts—The Trade Marks Rules of 1920—Qualities of a good product name—Famous examples analysed—Requirements of the trade mark—Current slogans: how to create them—The technique analysed

SHAKESPEARE'S assertion that "A rose by any other name would smell as sweet," must be taken with reserve when applied to advertising. A cigar is a cigar, no matter whether its cost be tuppence or five shillings, but the name is our safeguard against the rank variety that smells to Heaven.

Our product, without a name, is open to substitution by other lines of nondescript character which can be held up as "just as good." By giving our product a name and badge, we endow it with special character and put it forward as a thoroughbred of its particular species. We standardize it, offer it as dependable, and build up goodwill on the name and badge by which it is distinguished—the word mark and the trade mark.

When evolving these word marks and trade marks, we have not an absolutely free hand, but are bound by the requirements of the Trade Marks Acts.

## THE TRADE MARKS ACTS

The Act of 1905 defines a trade mark "as a 'mark' used or *proposed* to be used upon or in connection with goods for the purpose of indicating that they are the goods of the proprietor of such trade mark by virtue of manufacture, selection, certification, dealing with, or offering for sale."

It provides that "A registrable trade mark must contain or consist of at least one of the following essential particulars—

1. The name of a company, individual, or firm represented in a special or particular manner;

2. The signature of the applicant for registration or some predecessor in his business;

3. An invented word or invented words:

4. A word or words having no direct reference to the character or quality of the goods, and not being according to its ordinary

signification a geographical name or surname:

5. Any other distinctive mark, but a name, signature, or word or words, other than such as fall within the descriptions in the above paragraphs (1), (2), (3), and (4), shall not be registrable under the provisions of this paragraph except upon evidence of its distinctiveness.

"Provided always that any special or distinctive word or words, letter, numeral, or combination of letters or numerals used as a trade mark by the applicant or his predecessors in business before the thirteenth day of August, 1875, which has continued to be used (either in its original form or with additions and alterations not substantially affecting the identity of same) down to the date of the application for registration shall be registrable as a trade mark under this Act.

"For the purposes of this section 'distinctive' shall mean adapted to distinguish the goods of the proprietor of the trade mark from those of other persons.

"In determining whether a trade mark is so adapted the tribunal may, in the case of a trade mark in actual use, take into consideration the extent to which such user has rendered such trade mark in fact distinctive for the goods with respect to which it is registered or proposed to be registered."

It will be realized that Clause 1 precludes the setting of names, such as those indicated, in ordinary type, as it must be distinctive in order to become registrable, also that description of the goods is barred by Clause 4. The badge or design is indicated in Clause 5, and must be so far distinctive that any tendency to mislead is unlikely to arise.

Apart from design, any words included must not be such as might be coupled with the goods of another producer owning a trade mark.

The sound of the words will be considered as well as their appearance. Even though design might widely vary, the inclusion of words near alike in sound to those of an already registered trade mark will bring the risk of refusal. A word like "Fairyring" introduced while "Fairy Ring" exists is liable to bring about an action for infringement.

### THE TRADE MARKS RULES OF 1920

Further restrictions on choice are laid down in the Trade Marks Rules of 1920. The application may be refused by

the Registrar if the words "Patent," "Patented," "By Royal Letters Patent," "Copyright," "Registered Design," "Entered at Stationers' Hall," "To counterfeit this is forgery," or words in similar strain are included upon it.

Representation of Their Majesties or of any member of

the Royal Family is ruled out.

With the exception of marks which have been in use during a period prior to 18th August, 1875, down to the date of application for registration, the following are a few of the items which may not be included—the Royal Arms or Crests; the Royal or Imperial Crowns; the Anchor Devices of the Admiralty; the Eagle device and the Wings device of the Royal Air Force; any device similar to these, and which is likely to be mistaken for them.

The red cross on a white ground, and the words "Red Cross" or "Geneva Cross" may not be registered except with the authority of the Army Council.

On acceptance, the trade mark is not immediately registered, but is advertised in the official organ—the

Trade Marks Journal.

During a period of one month from the date of appearance, application may be made by any person opposing registration, which application must be made in writing and must state the grounds of objection.

The life of a registered trade mark is fourteen years, with an option of renewal at the expiration of each period of

fourteen years.

The foregoing is, of course, simply an inkling of a very involved business, but it will give a slight idea of at least what *cannot* be used in a word mark or a trade mark. Any further information can be obtained through The Chartered Institute of Patent Agents or by reading the instructional pamphlet, issued free by the Patent Office.

## QUALITIES OF A GOOD PRODUCT NAME

Let us now consider the product name and trade mark, as they must be presented to the public in order to carry the maximum effect.

Fully used, they will appear in all advertisements and printed matter, perhaps on the goods themselves, on labels, containers, cartons, and wholesale packing.

Simplicity in both name and mark is a great consideration. The name of the product in the form of an invented word should be not only short, but understandable, easily remembered, and leave no doubt as to correct pronunciation. Dealing with this last item, let us imagine a product for the cleaning of artificial teeth. A name is chosen—"Clēnadent"—which suggests the use of the product, i.e. to clean dentures.

Despite the accent placed over the "e" in order to suggest the long sound of double e, the pronunciation will be obscure to many people. Some will ignore the accent, include a short-sounding e (as in "men"), and call it "Clen-ay-dent" with a stress on the middle syllable. They might even stress the final syllable.

What can we do about it? We can simplify by cutting the accent, hyphenate the word, and call it "Cleen-a-dent." As an alternative which will not interfere with the effect or meaning, we can eliminate the tendency to a long "a" by substituting "er" and call the product "Cleener-dent."

This might appear a quibble, but actually it is a real problem and depends upon the word chosen. Some words seem to be pronounced correctly in the natural course, while others are just as likely to be distorted. It is difficult to get at the reason of this, but it might be due to association with other words. The word "Pepsodent" will rarely be wrongly pronounced—perhaps the idea of "pepsin" is a guide, as also the name of a well-known rainproof, "Telemac," which is coupled with "telescope" and ability to be packed into small compass.

The next point to consider is the euphony of the word chosen. It must trip off the tongue easily and be pleasant to the ear.

Ugly vowel sounds should be avoided, so that the word will sound soft and musical. As an illustration of what is meant by soft and hard words, it might be mentioned that a good singer will substitute the word "circus" in the text of the "Song of the Toreador" from *Carmen* for the more euphonious "arena." In the first word, we have ugly vowels and lots of hiss, while in the second the vowels are more rounded and the word has a pleasant rolling effect.

Product names which are really good cannot be turned

out in a hurry and with the ease of barrel-organ grinding. Their evolution requires a fair amount of thought. It is often a matter of invention, substitution and scrapping, the cycle being repeated until satisfaction is reached. We bring an analysis into play by asking ourselves questions, such as—How can we sum up the product in one or two words? What are its qualities? What can it do? What benefit does it offer? What associated idea can we play upon? What connection with its place of origin? What of the producer's name? Can two or three words be combined in an invented word?

# FAMOUS EXAMPLES ANALYSED

Studying a few of the prominent product names, we see that the name "Palmolive" is a combination of the names of two valuable constituent oils. "Ekco" is extracted from the name of E. K. Cole Ltd., the radio manufacturers. "Emu" tells of an Australian wine through the medium of the name of a native bird. "O.K." and "A.1" stand for two famous sauces and tell their own tale. "Aertex" suggests air and texture—good ventilation in underwear. "Velveeta" describes a cheese both smooth and soft to the palate, "Pyrex" a king of fire-resisting ovenware, while "Oxo" and "Beefex" are self-explanatory.

"Lux," when we know it to be a soap product, certainly

gives the impression of light, luxurious lather.

"Ovaltine" gives us a clue to a content of eggs in the product, and the "vita's" found in some names might refer either to the presence of the various vitamins, or represent the life, energy and vitality offered to users of the particular product. Examples of these are the tonic food drinks "Bournvita" and "Vitacup," and the bread "Vit Be," which, as its name implies, contains a useful quota of health-promoting Vitamin B. "Ryvita" tells of the rye content in this "Crispbread."

One comes across product names which depend upon syllables or words rooted in Latin or other foreign origin, e.g. "Solprufe," "Durabelle," "Regesan," "Salutaris," "Tutti-Frutti," "Polivarn," "Bon Soir," "Multigraph," and "Riz La Croix." In the same manner as some advertisers give instruction in their advertisements as to

pronunciation of their product name, if at all uncertain or difficult, so do certain others, when using words such as just quoted, make the name not only clear but of greater interest, by giving the significance of the word. Instances of this are "Kia-Ora," the meaning of which is given us, by the proprietors of a good drink, as the Maori way of saying "Good health." Messrs. Grossmith add romance and atmosphere to their perfume "Shem-el-Nessim" when they put us wise to the meaning of its name—"The scent of Araby."

# REQUIREMENTS OF THE TRADE MARK

So much for the title of the product. Now for its coat of arms or badge—the trade mark design. As in the case of many other things connected with advertising, the simplest is best.

Bearing in mind that a trade mark should be adaptable for reproduction on any surface, from "art" paper to unplaned wood, it will be realized that treatment should consist of clear open line or of broad masses—all niggling detail and unnecessary embellishment being severely cut out. Treatment will, of course, vary with the needs of the product and the idea, as in any other piece of design. It may be medallion style, triangular or other geometrical shape, or, for instance, a representation of a tree or an animal incorporated in a distinctive design.

The mark must not be identical with any mark on record, or even resemble it so nearly as to be likely to deceive. General effect is taken into account and not merely difference in detail. In order to ascertain if the mark is in fact distinctive, a search must be made amongst the classified representations of Trade Marks, at the Trade Marks Branch of the Patent Office, 25 Southampton Buildings, W.C.2.

Any person is entitled to make this search, or application can be made to the Registrar requesting that a search be made. It is a case of making the choice and paying the prescribed moderate fee.

Here are a few more restrictions on registration. It might be thought that these are rather numerous, but reflection will convince of their wisdom and necessity.

In the case of a new mark, i.e. unless used since prior to

18th August, 1875, the following are not allowable on trade marks and are in addition to items already quoted. We cannot do better than quote from the official pamphlet—issued free—"Instructions to Persons who wish to Register Trade Marks."

"Any words (such as 'Empire,' 'Dominion,' or 'Crown'), letters or devices, used in such a manner as to be calculated to lead persons to think that the applicant has Royal or Imperial patronage or authorization. In cases where representations of armorial bearings, insignia, emblems, decorations or flags of any State, or of any city, borough, town, place, society, body corporate, institution or individual appear on a Mark, the Registrar may require justification for their use. Where the names or representations of living persons or persons recently deceased appear on a mark, the Registrar may require the consent of such living persons or of the legal representatives of such deceased persons.

"Where there appears on the face of a Trade Mark the name or a description of the goods to which the Mark is applied, the Registrar may refuse to register such Mark in respect of any goods other than the goods so named or described. If the name or description of any goods appears on a Trade Mark, and such name or description varies in use, the applicant should include in his application a statement to this effect. Ornamental or coloured groundwork, such as tartans or checks, cannot be claimed as part of a Mark, unless such groundwork be included within the Mark by some border or lines."

The use of the words "Royal" or "Imperial" and of the British Royal, Imperial or National flags is also prohibited.

Descriptive words of a non-distinctive character in common use in the trade, or open to use in the trade, may be used although not separately registrable, but in the case of a new mark the Registrar may require that no claim to the right of exclusive use be made by the applicant.

In passing, one or two points on the technical side. Designs must not be carried out in pencil. The fact that they are bound into volumes and come in for hard handling during many searches calls for a durable job. If the design be large and folding is likely to be necessary, it should be backed with linen or tracing cloth by way of reinforcement. Line blocks and wood blocks—or electros or stereos of originals—are recommended as most suitable for reproduction in the *Trade Marks Journal*, while the use of halftone blocks is discouraged. This gives the cue to the best technique to use in the design of your trade mark.

Indistinct, worn or battered blocks will not be accepted. After use, all blocks are retained by the Registrar and cannot be returned to an applicant, even for temporary use.

#### THE SLOGAN OR CATCH-PHRASE

Last to be dealt with in this chapter is the motto or battle cry of the product—the slogan or catch-phrase. If there is a difference between the two, we can describe the slogan as a war-cry pure and simple, while the catch-phrase is what its name implies—an idea put into words with the intention of catching the fancy of the buying public. The slogan is a kind of snappy motto into which the "self-esteem" of the product is incorporated, or by which a command is issued, while the catch-phrase can be of a more suggestive character. Sometimes there is evidence of combination of the two.

Slogans or catch-phrases depend for effect upon the principle of repetition. We strive to put the name of the product into the mouth of the public, and trust that it will "stick" through the means of the easily remembered or catchy phrase oft repeated.

The principle of construction is similar to that to be followed when evolving headlines. We can do this by featuring the product—"it is" or "it does"—or by spurring the prospect with "do this" or "note that."

Suggestion, alliteration, euphony and rhyme can be borne in mind, also the possibility of paraphrase on nursery rhyme and proverb.

The main point to be remembered is that a good catchphrase or slogan should incorporate the name of the product—tied up in the phrase. However good a phrase might otherwise be (in theory), unless by its means the name of the product is advertised and remembered, it is really a failure.

The name must be "got over." This calls to mind a novel method carried out by the advertisers of a well-known whisky. At a certain south coast resort, a boat was seen cruising a short way out at sea, and displaying the notice, "Don't be vague!" Some of the onlookers were not—they knew the entire slogan. Others were. Wondering,

they banished their own vagueness by making inquiry. They learned that "Ask for Haig" was the missing link.

In this way, the slogan "Don't be vague—ask for Haig" was put over in one of the strongest ways possible. Attraction, intensity of sensation, curiosity and interest all helped to focus the preparation, while the learning of the slogan in two parts, the second most likely following a little discussion, would be likely to fix the slogan in the minds of both informers and informed.

#### CURRENT SLOGANS—HOW TO CREATE THEM

Study of good advertising, thought, and expenditure of plenty of ink and paper is, as in other phases of advertisement writing, the only way to the possibility of evolving good work. Here are a few specimens of current slogans and catch-phrases—

"It is" and "It does" type: "It beats as it sweeps as it cleans" (Hoover). "Great stuff this Bass." "Guinness is good for you."

"Do this" type: "Eat Bread for energy." "Get it at Harrods." "Get that Kruschen feeling." "Keep that schoolgirl complexion."

"Suggestive" type: "Mine's a Minor." "Player's Please"—a good double-meaning slogan. "You should see me on Sunday" is the phrase for John Knight's Family Health Soap, depending for effect upon a picture of a goodnatured but particularly grimy sweep.

"Question" type: "Did you Maclean your teeth to-day?" following the style of one of the earliest—"Good morning! Have you used Pears' Soap?"

"Adapted nursery rhyme" type: "They shall have Moussec wherever they go." "Mary had a little lamb—with lots of H.P. Sauce."

Let us have a try at evolving a few of our own, and by way of keeping the spirits up let us start on whisky. To our own idea as advertisers, our whisky is unbeatable, and so we pass on our good advice, "Perfection's no fable—just try a White Label." Maybe we consider the choice of our product as a foregone conclusion amongst good judges, and strive to spread education of taste by means of the suggestive "White Horse—of course!" We could appeal to

the sporting section of the public with "Back 'White Horse' for a winning 'double.'"

As an aid to sound sleep, we give advice that "The best 'cap' at night is a good Black and White," or offer seven-year-old Jameson's as a pick-me up through the phrase "There's life in a dram of old Johnny Jam." Playing upon the name of the proprietors we give the tip, "Learn of good whisky—ask for Teacher's!"

Turning teetotal, we turn to tea. Good tea means a fine brew in a large cup from a small spoonful—quality with economy. We cover this with "Brooke Bond Tea—connoisseur economy." Here we have rhyme and alliteration with two "B's" and two "con's."

"Early to bed and early to Eno's" carries a touch of the proverb and suggests the habitual early morning drink of good health.

Power in a car. How can we get it over? We might suggest it in the form of a definition as, "Plateau—a steep hill under a Bentley" or be more descriptive and poetical with "Panther pace; pussy purr; gazelle grace—Riley."

For our plain couplet we will choose tobacco. Thinking of all the joys associated with the fragrant weed, we might evolve something similar to the following—

Comfy fire; easy chair; slippers on. Fav'rite pipe; puffs content; RUBICON!

A play on the product name is sometimes possible (as in Teacher's above) when turning out a couplet. "Did you Maclean your teeth to-day?" is well known as a question. Let us turn it into a couplet of teeth, smiles and happiness, something like this—

Teeth gleam—smiles beam—happy familee!
Pa cleans, Bobby cleans, and MA-CLEANS you see!

Nursery rhymes have strongly marked lilt and rhythm, and for this reason are useful for adaptation as slogans or couplets. With all due apologies to the author of "Sing a song o' sixpence," here is an effort—

Sing a song o' gravy, pies and all the rest. BISTO gives them flavour—put it to the test!

# A song of Suinness

Sing a song of Guinness
A bottle full of good,
Since it is for goodness
Guinness always stood.
When the bottle's opened
We all begin to shout,

"There's nothing like a Guinness

When you feel-tired-out."



An adapted nursery rhyme. On the face of it, this advertisement plain and straightforward but really it is cleverly displayed. The heading will draw attention owing to the substitution of the († in Guinness musical sign—G Thinking of the words and lilt of our early friend "Sing a Song o' Sixpence," we shall remember the stress on the words "Now wasn't that a dainty dish, etc." We recall that they had a kind of jerk, like walking downstairs. Notice what the typographer has done with the words "There's nothing like a Guinness." Note the extra lilt and strength? "Staggering" should not be resorted to in the usual wayunless for a good reason, such as in this case. Display lines are set in Tiemann Bold and body matter in Goudy Bold.

Produced by Messrs, S. H. Benson Ltd.

# THE TECHNIQUE ANALYSED

When endeavouring to evolve an idea, the general tendency is to "go right to it"; in other words, to commence by racking the brain in hopes of striking something worth while. The usual result of this method is arrival at a cross road of many ways with all lights at "Stop," followed by bewilderment and finally a headache. The mind, like a train, follows the line which is laid for it. The "points" must be set if we wish to reach a definite destination.

Set your points—the product, its qualities, uses, associations, likely and homely words of comment, and the possibility of play upon name. Do any of the "types," descriptive, command, suggestive or question give a lead? Can nursery rhyme or proverb be adapted, or does the subject lend itself to simple couplet?

Study the specimens given. The words "It beats as it sweeps as it cleans" tell us a good deal about the Hoover. Not only can we imagine the machine "getting down to it," but we can almost hear the hum of it through the level rhythm contained in the phrase.

Note the pun in "They shall have Moussec wherever they go."

Consider how the Bentley phrase was turned. The Bentley is a fast car and a good hill-climber; it takes hills in its stride. The hills are very real, except to the Bentley—the car that makes the earth flat—one large plateau.

It is just a matter of association in thought, as in the case of the Rubicon couplet. Here we think of one of the situations in which a man is really content. We collect the ingredients of the happy situation—a winter night in this instance—watch rhyme and metre, and keep going until satisfied. Have a try at turning one out which tells of the Rubicon man in the open country, carefree, with his dog as companion—or at the speedway—football match—drawing room—anywhere you fancy!

In the case of Bisto, we collect a few of its culinary associates, tell our reader that "it does," and finally say: "Do this!"

Wit and humour can sometimes be introduced into

slogans and catch-phrases with good effect. One of the cleverest efforts—if not the cleverest—which has been turned out, is the much-in-little "That's Shell, that was!" By the majority of people, this is considered really fine and yet there are some folks who, in all sincerity, see nothing in it.

To please all is a job for the gods: our endeavour must be to please the majority. A play might be considered first-rate by its writer, its producer and others concerned with it, and then turn out a "flop."

It is the same with our slogans. We cannot make them all winners, but we can endeavour to make them snappy and to take a hand in advertising the goods. Avoid obscurity, play to the understanding of the majority, but do not be put off by the thought of the few who cannot or will not understand.

#### CHAPTER VII

#### PICTORIAL APPEAL

Picture must be relevant—Test your "roughs"—The camera can lie—Idealism versus realism—Basic technique—Media used by artists—Line drawing on scraper board—Brushwork—Wood engraving and lino-cut—To summarize

THERE is only one reason for the publication of an advertisement—and that is to interest a potentially indifferent public in a certain proposition.

The job of advertisements in general is to sell the maximum amount of goods. If this can be done by means of copy alone, it is all to the good—a saving of money on the artist's account or the photographer's fee. It may be possible in certain cases, but it is certainly not in all.

In the majority of instances, a good illustration will add to the attraction value of the layout to an extent far outweighing its cost.

"Every picture tells a story" is well known as the slogan for a good pill for a bad backache. Used in the general sense it is also an indisputable truth. Pictures appeal to the *imagination* and are an aid to *perception*. A map or diagram, even though roughly drawn, will often convey more than a long drawn out verbal description or pages of reading.

Man found his means of expression in pictures ages before writing became a descriptive art—out of the picture came the word. Primitive man, feeling himself unable to do justice to his prowess through the means of his limited vocabulary, depicted that "whopper" of a bear or reindeer by scratches on chunks of bone.

It is through the medium of pictures that we have learned a great deal about the life of man long ago. In the caves of Spain we learn of animals contemporary with the primitive man who executed the beautiful coloured drawings twenty-five thousand years ago. The domestic life of ancient Egypt, and the battles, weapons, dresses and building

operations of Babylon are all put before us by men who were eye-witnesses.

Those pictures tell us more about the clothing, implements and mode of life of those ancient peoples than a volume of description, which description, if it existed, might be interpreted in many ways, according to the imagination of the reader.

Pictures not only instruct but they attract and interest. When young, we are kept quiet and incidentally are given our first lessons through the medium of the picture-book. This love of pictures seldom dies.

The popularity of the cinema can perhaps be attributed to the fact that it shows us a picture of life—offers a tale with an illustration. At its best, it can bring a book to life, popularizing it and making the characters more real. The picture must, however, be good, otherwise both book and picture will be liable to be indexed by the public under the classification, "rotten."

So much for an endeavour to show that in general there is a need for pictures in advertising, and that the picture should tell an interesting and easily comprehended tale.

Let us consider that we have an advertisement in need of an illustration. Of what should it consist and what should we put into it, in order to make it part of the general scheme?

# PICTURE MUST BE RELEVANT

It has already been pointed out that the illustration must be relevant to, and connected with the goods. Our picture is to be included with the idea of attracting attention, arousing interest, and giving more force to our story.

We would not illustrate a detective novel with pictures of cowboys and Indians, nor use a backsheet depicting Piccadilly Circus as a setting for the forest scene in As You Like It. On the same principle, we would not include a picture of a kangaroo, or anything else, simply to gain attention, but would use a picture such as could be connected to the text through the headline.

Attention is the first consideration, however, and we must work on the principles which are calculated to make the strongest appeal.

The first principle of attention depends upon the absence of counter attractions. It will be realized from this that the ability of our picture to attract attention will not only depend upon the treatment of the drawing, but on the amount of *interest* which can be incorporated in it.

How are we to include this interest? What is the product? Does it lend itself to still-life treatment, or would the inclusion of the human figure add to its attraction value? Can we show the product in use, illustrating its superiority and desirability? Will a "close-up" be most effective, with special focus on some particular detail? Is there a telling "high spot" of the story which can be put into pictorial form?

#### TEST YOUR "ROUGHS"

One way of coming to a decision is to execute a "rough" of the proposed illustration, and then consider it, or, better still, offer it apart from the copy to a few frank friends for consideration. This is a stiff but very real test, and will reveal what the picture really conveys and if it illustrates at all.

It has been found that action pictures including the human figure are, in the general course, the most effective and that the simple inclusion of a bottle, tin or package makes for a dead advertisement.

Whatever we do, and however we treat our illustration, the principle of ease of comprehension must be borne in mind. The picture must tell its story directly and clearly, and be easily understood.

In an advertisement of "facts and brass tacks," if detail is of great importance and is likely to weigh heavily with the public in favour of the product, show that detail clearly.

With certain utilities, it might be necessary for our picture to take the form of a simple diagram or direct illustration, but when dealing with a direct appeal to the senses, or a product which, through its use, can have a sense appeal, it is not always necessary to be so matter of fact.

In the latter case, we can show through our picture the comfort and health that may be gained, the beauty that can be seen, and—in symbolic or comparative form—the labour eliminated or the money saved by the use of the advertised product. This type of picture can be thought of as the scenery or setting of the tale recounted in the copy; it creates that which is known as *atmosphere*.

These "atmosphere" pictures can, of course, take on many forms and the form chosen will depend upon the copy it is proposed to illustrate. There is not much more to be said about the ordinary sense-gripping picture of countryside or home enjoyment, other than that it should radiate life and happiness.

When the fact-cum-story illustration is used, showing the product undergoing a test of the greatest severity, it must be seen to that the product be given pride of place. It must be made to stand out and be seen. The picture must make the product as good as say: "I'm standing up to this battery!" or "See me supporting all this great weight?"

If the copy takes the form of "an origin and evolution tale," a picture or series of pictures can be used showing scenes and facts relating to the product, workers engaged in its production, raw materials (if interesting) and manufacturing processes. In this case, it must be realized that pictures of wide expanses of country and groups of inactive natives or other workmen are dull. Far better to focus upon a smaller section or detail, and one which is most likely to interest. Picture activity and at the same time give information. You are using "educational" copy, therefore make the illustration an additional teacher.

In the foregoing, effort has been made to show how the illustration can be adapted to the appeal and tuned to the copy. We will now consider how the picture can be formed for effect on the prospect.

# THE CAMERA CAN LIE!

The well-worn tag has it that "The camera never lies." It does not take an expert, however, to put the feet of a giant on a two-year-old child. Simple—just get the feet out of focus! There is no doubt that an expert could show us other equally funny things, but the tag is true in normal circumstances of skilled photography—the camera shows us things as they really are—it deals in realism.



# S:JULIEN

This grand tobacco still remains unchallenged—for its exceptional coolness in smoking, and its rich, unique and very pleasing fragrance. The pure VIRGINIA is 111d. an ounce: the EMPIRE (a blend of Empire and Virginia tobaccos), 10d.

Produced by Mesers. John Haddon & Co. Ltd.

An example of fine imagination and the alert ability to find the fresh viewpoint. Tie-up or unity is achieved through two display lines of penscript style set in Legend type, a comparatively unusual face. Another point for note in this series is the arrangement by which the word "Tobacco" is always displayed at the beginning of the copy.

Being a teller of the truth—whole and nothing but—pictures which are the work of its eye and bellows are specially suited in instances where the slightest suggestion of exaggeration might be fatal to the good name of the product. If we wish to show the goods "as they really are," the camera cannot be beaten.

Personal touch and human appeal can often be made very effective by the use of photographs of specially posed models. Tiny tots, caught in particularly quaint poses and varieties of mood are bound to attract most women—and some men. Their "naturalness" is lovely.

From the point of view of attraction, a good photograph can be made to hold its own, but, as in the case of all art, cheap is not always inexpensive. When in the market for photographic illustrations, seek out a good man. His extra posing skill, the concentration of light and calculated shadow-play in his work will be the making of the picture and a consequent attraction to the advertisement.

All really good art, whether photograph or drawing, carries the mark of superiority—shared by the advertisement which it caps.

By this time, the thought has probably entered the minds of some readers as to why, if the camera gives pictures dead true to life, should the advertiser ever consider the employment of the graphic artist.

# IDEALISM VERSUS REALISM

It is a matter of realism against idealism. An exact reflection of Nature as opposed to a reflection which it would please us better to see. We can think of the photographer as an announcer and the artist as an interpreter. Do not run away with the idea, however, that a picture by a photographic artist cannot be a work of art. Try at the same time to realize that the graphic artist can "adapt" that which he has to depict to a greater extent than is possible with the camera.

It is what might be termed "material idealism" that we play up to in our advertisement illustrations, and here the graphic artist comes in with his stress, emphasis, selection and interpretation. His pictures cannot beat the camera for absolute "truth," but when it comes to impressions,

they can win. It is "made like" versus "made to be liked."

This quest of feeling and impression sometimes entails a certain amount of exaggeration, as in the case of the ultrawillowy female figures seen on fashion plates. These pictures show dresses and costumes as women hope—and in many cases believe—they will look with themselves as the wearer. The ideal female figure for advertising is not that of the Venus de Milo.

Idealizing by means of exaggeration is nothing new—witness the super-Samsonic muscles in Assyrian sculpture, and the lengthening of the shin in the ancient Grecian figures—this in order to give to the human form the "ideal" height of eight heads. The one strives to stress physical power, while the other aims at emphasizing god-like beauty.

The job of the artist is to make the beholder "feel" the scene, form or action depicted, and a certain amount of stress or emphasis is sometimes necessary in order to bring this about.

Drawing an athlete in action, he will intensify the attitude of concentrated effort, so that the reader of the advertisement which it illustrates will sympathetically feel the tenseness of the muscles, the eager pressing forward, and withal the poetical ease of movement. If it be a humorous drawing in which an awkward person is shown struggling furiously with a folding deck-chair, he will place the performer in attitudes which would never be met with in real life and therefore could not be imitated by the camera.

In the decorative style of drawing he will show why a weeping willow bears that particular name. If he be a really good artist, he will, in all his pictorial designs, place lines and curves with the object of making the beholder respond in feeling—in similar manner or on similar principle as a well-marked musical rhythm will cause the listener, consciously or unconsciously, to tap his feet or otherwise beat out the time.

This then is the job of the artist—to take that which the camera can only reflect, and find what might be termed its soul. He will dissect it, explain it, amplify it and maybe

idealize it. His aim will be to intensify sensation and to play upon feeling, which two principles, together with contrast, and individuality which can help overshadow counter attractions, are the basic principles of attraction value.

# BASIC TECHNIQUE

Our next consideration is the technique of the picture most suited to the general scheme, bearing in mind the possibilities or limitations of the paper used for the publication in which the advertisement is to appear.

Before we go any further, let us realize that the picture is needed for reproduction, and that this reproduction means transfer to paper of printing ink deposited by the ink roller of the machine on to the effective portions of a printing surface.

In ordinary printing—known as letterpress—the principle, at its simplest, is similar to that of the rubber stamp and inking pad.

If we had a square of flat rubber as a stamp, it would simply give us as an impression a square blob of ink, all one "colour" or tone, whereas if the rubber square were scored across with lines of gradually increasing thickness—or of equal thickness but varying nearness to one another—we should obtain in the impression an illusion of graduated tone or "colour." Again, if it were possible to cut, on the surface of the stamp, spots of varying size and nearness to one another, in graduation from end to end, we should attain a similar effect of tone.

It will be realized from this, that when we come to reproduce a drawing or photograph, we have to depend upon the interplay between light reflected from the paper and the weight of deposited ink for an *illusion* of graduated tone.

# MEDIA USED BY ARTISTS

In view of this, let us consider the media with which an artist may work. He can turn out a drawing in pure line by means of pen and ink, in which case reproduction by the line process will show the lines unbroken as in the original drawing. Similar to our example of the line-scored rubber stamp, the variation of lines in thickness and

distance apart will, with the light from the unprinted paper, give us the illusion of tone. It must be remembered that, in letterpress printing, all printing surfaces are equally inked. The machine can lay a flat tone, but cannot



FINE LINE BLOCK (PEN DRAWING)

By courtesy of The Sun Engraving Co., Ltd.

print an unbroken graduated tone such as that represented by the wash laid down by the brush of the artist.

When crayon is used as the medium, the artist may use a rough or grained paper. He can work in line or tone, and the grain of the paper will have the effect of breaking up the tone into tiny patches of black with white paper between them, so giving our interplay and illusion of tone.

If, however, instead of pure line or broken-up tone, the artist used a technique of unbroken, graduated tones, e.g. a wash drawing, the picture must be broken up into dots by the reproduction process before it can be reproduced by the printing machine. This breaking up of a tone picture can be seen by referring to any of the popular illustrated papers.

Having considered the general principle of effect of the line and half-tone reproduction processes, we will deal more fully with their limitations and possibilities in the next chapter.

We have discussed the when and where to use photographs, the need for graphic art, and how drawings should be used. The kind of drawing to use will depend upon the general "colour" aimed for in the advertisement, its "atmosphere," typography, purpose of the illustration, as well as consideration of contrast and striving after individual style.

In the usual course of things, newspaper advertisements are best illustrated by means of line work, for a reason which will be considered later.

Pen drawings have a great amount of fascination and brilliance when carried out by a good man. Clean, direct, open and sweeping line, without the slightest suggestion of tentativeness, is the thing to look for here. If need be, extreme delicacy can be incorporated in a pen drawing, besides strong and brilliant graduation from black to white.

A crayon drawing can be equally fascinating in its own manner. Normally a heavier medium than the pen, it can be very vigorous and forceful. Under a light touch, however, crayon is capable of producing quite dainty work. It can also be used in conjunction with wash—the crayon for vigorous line and heavy shadows, with wash for the more delicate middle tones.

# LINE DRAWING ON SCRAPER BOARD

A method which has deservedly come into its own is the line drawing on scraper board. This scraper board has a specially prepared surface which will take a good pen line. The peculiarity about it is that a draughtsman may lay a wash of ink on its surface and then, by means of a penknife or other sharp pointed tool, lightly scrape away any ink which he does not wish to remain.

The board enables him to produce some telling modelling, scrape out highlights, or to chop cleanly and neatly any

line or lines into many smaller sections. What it amounts to is—that he can draw and engrave on this specially prepared board and obtain effects which would be next to impossible in ordinary "straight" pen drawing.

The effects produced by this method can be particularly brilliant, embodying as they do the decision of the pen drawing with the "incision" of the wood engraving.

# BRUSHWORK

The brush may be used to produce either a line or wash drawing. It can be a sympathetic tool for the production of line work, giving strength and activity with plenty of feeling and variety. One particular type of brush line work is that known as the shadow or Rembrandt style, in which the modelling is shown by the use of heavy shadow effects.

BOLD LINE BLOCK
By courtesy of The
Sun Engraving Co., Ltd.

Speaking generally, the difference in effect between the line drawing and the wash drawing is that the graduation of tone in the wash drawing is gradual and the contrasts are not so marked, as for instance in the pen drawing. For this reason a reproduced photograph or wash illustration will appear softer in tone and variety of colour when opposed to a strong line reproduction. The line drawing has a greater "suddenness" in its appearance due to adjacent contrasts being stronger and steeper.

An illustration may include a combination of the different media—crayon and wash; line and wash; line, wash and crayon. A photograph can be used in conjunction with pen work, or perhaps be adapted to a crayon background. This is a method of contrast sometimes found useful for focusing attention to the main theme.

The combinations mentioned above, as they include photograph and wash, may be reproduced entirely by the half-tone process. There are to be had, however, plates combining line and half-tone.

In certain circumstances, these may be used if it be wished to keep the line work of the combination picture intact. In a simple half-tone plate, the whole of the picture is broken up into dots, and therefore the effect on the line work is to reduce it in tone, fade it, or make what is sometimes called "phantom line."

#### WOOD ENGRAVING AND LINO-CUT

Last of the illustrations to be dealt with are the wood engraving and the lino-cut.

The first is a chance for the man with a little extra money to spend on something which can be very individual. The earliest method of reproduction, it is a first-rate medium for bringing an atmosphere of antiquity. It might be imitated with pen-line, but it has what the pen-drawn product lacks—the mark of the tool.

The fine detail which can be put into this work is really remarkable. The tooling has a fascination all of its own, while the general colour works in easy harmony with type. The only drawback is cost.

The lino-cut has quite good possibilities where good broad masses are required. It is simply what its name implies. A drawing is made, in reverse, on a piece of thick plain lino, and then the surplus material is cut away from around the lines by means of special knives and gouges. There are plenty of good artists working in this medium. Though it is simple and can be very effective, it requires using with consideration and care if a coarse botch is not to be the result. For short runs lino-cuts are a particularly useful medium in printing small letterpress posters of one or more colours in bold line and mass.

#### TO SUMMARIZE

Summarizing—see to it that the picture is relevant to the theme; decide whether a plain illustration of the goods will be sufficient; whether to show the goods in use. Life depicted is an aid to attraction; pictures of human beings "doing things" attract attention. Will a "close-up" be most effective? Is there a "high spot" in the tale which could be illustrated? If detail counts, show it plainly. Remember the sense appeal and consider "atmosphere" required. How can the picture help the style of copy—humour, topical, etc.? Avoid the "wide open spaces" type of picture—focus on interest. Make the picture "educational." If "matter-of-fact" copy, is camera work the most suitable?

We have just dealt with technique, therefore the best concluding advice is—search out and study good advertisements, pick out the particularly good illustrations and endeavour to discover the reasons why they "fit."

#### CHAPTER VIII

#### PRINTING METHODS AND REPRODUCTION PROCESSES

THE three basic methods—The photo-mechanical process—The zinco—The half-tone—The Levy screen—Burning-in and etching —Spread—Screens—The three-colour process—Ordering blocks: points to watch—Measuring originals for blockmaking—Highlight and deep-etched half-tones—Use of mechanical tints—Half-lining—Saving on blockmaking—Electrotypes—The stercotype—Newspaper stereos—Life of a block—Lithography—The "Key" offsets—Photo-litho—Litho-offset—Collotype—The Pantone process—Intaglio printing—The rotogravure process—Another intaglio process

Modern printing may be classified under three headings, and each of the three methods is given a name which describes the ink-carrying area of the "surface"—type, block, stone or plate—from which an impression is obtained. They may be thought of variously as "hill," "plain" and "valley" methods.

#### THE THREE BASIC METHODS

The first, the most commonly used, is known as relief or letterpress printing, and is so named because the printing surface of type and blocks is raised above the surface of the "surrounding country." The ink is deposited by the roller of the machine on to the flat "hill-tops" represented by the effective surfaces of type and block.

The second is called *planographic* printing. This is the method of obtaining an impression from a flat surface—where the ink-carrying area is, to all intents and purposes, on the same plane or level as the non-effective areas. To the uninitiated, this would seem to be an impossibility, but we shall find out the secret a little later.

The last of the three basic methods is known as *intaglio* printing. The word is Italian and its pronunciation in English is somewhat like "intal-yo"—the letter combination "gli" having a sound similar to the "lli" in the word "million." It's a terrible word when it is pronounced with the hard English g!

The meaning of the word is "to cut into or engrave," and in this instance conveys the fact that the ink-carrying areas are in the form of valleys sinking below the general surface of the plate. It is, in fact, really the opposite to letterpress printing, in that the "valleys" print while the highest level of the plate surface does not.

Having grasped the general principles of the three methods, we can pass on to consider the means of preparing these different printing surfaces. Each process is a very tricky and highly skilled job, including much technical detail. It will serve our purpose if we can thoroughly capture a simple outline.

#### THE PHOTO-MECHANICAL PROCESS

The method employed in making the majority of these printing surfaces is known as the photo-mechanical process. It should be understood that "printing surfaces," in this instance, refers to those surfaces produced by the photographic process—not to type which has been separately set.

If we bear in mind our efforts as amateur photographers, we shall, perhaps, grasp the principles more easily. When we set out to obtain a picture, we have in our camera a plate or film coated with a substance which is sensitive to the action of light. On making an exposure, the light reflected from the "subject" enters the camera through the lens, causing a chemical change to take place in the coating, varying in intensity according to the strength of light focussed upon the particular region of film or plate.

The effect of "development" is to remove the coating in varying degrees, according to the degree of hardening which has taken place owing to the action of light. With the blackening of the light-sensitive coating after development, we have a negative—a picture with the values reversed, i.e. darks for lights and lights for darks. We next place the negative, the right way round, in contact with a sheet of paper with a sensitized surface, and by exposure to light, obtain a positive or picture showing darks and lights in their correct places relative to those seen in the subject.

In the case of photo-mechanical processes, metal which

has been given a light-sensitive surface takes the place of the sensitized paper, and as the "picture" must be reversed on the printing block in order to obtain an impression the right way round, the negative must be as in reverse when making the photographic "print" on the metal. In order to obtain this reversed negative, the exposure is made through a prism specially designed for the purpose and which is attached to the lens of the camera.

We will now deal with the method of producing "original" blocks for use in letterpress printing. "Original" blocks are those produced either by hand-cutting or by the photo-mechanical process, as opposed to copies of them obtained by moulding and other means.

These copies, which take the form of electros and stereos, will subsequently be described in detail.

In the case of the wood engraving and the lino-cut, the surplus material is cut away by hand, leaving the effective printing surface standing up in relief. With process engraving, the biting action of acid takes the place of hand tooling in the actual formation of the block. If hand tooling be used, it is as a finishing process.

#### THE ZINCO

A line process block is called a "zinco," after the metal of which the plate is usually composed. Let us consider that the line drawing has been photographed, the negative made and the print laid down on the sensitized zinc or copper plate.

Unlike the human artist, acid is not particular as to what it etches away, and therefore its field of operation must be restricted to the non-printing parts of the plate. In other words, the lines must be protected.

To ensure this, the plate is first rolled with a special preparation of ink, and then, while under running water, is rubbed over with a wad of cotton wool. This rubbing has the effect of removing the softer portions of the coating which have not been affected by the strong light. So we have the lines of the picture, covered with ink and surrounded by the bare metal.

After the plate is dusted with a reddish powder, known as dragon's blood, which attaches itself to the inked lines, it

is next heated and the powder melts. This forms a coating for the lines which is acid-resisting. The plate is now ready for the etching bath, composed of nitric acid and water.

This acid solution commences the good work of eating away the parts of the plate unprotected by the acid-



resist, but the plate must still be carefully watched, owing to the danger of the acid carrying out its work of excavation under the lines and thinning their support—making breaking and crumbling of the line an unpleasant likelihood. The dusting operation is repeated before this can take place. The dragon's blood is drifted against the sides of the partially etched lines; when the plate is heated, the powder melts, and when cool forms the necessary protection.

So the process goes on until the plate is sufficiently deeply etched, after which the acid-proof coating is washed off.

The plate has now to be finished, so that it is ready and fit to be used on the printing machine. Nothing must appear in the reproduction which is not in the drawing. There is a danger of "fouling" should there remain, after the acid etch, any unduly high spots in the non-printing area. It is the work of the routing machine to remove these and to bring the non-effective area well below the printing surface. The last operation consists of mounting the plate on a block of wood in order to bring it to the correct "height to paper" or "type high," which, in England, is 0.918 in., or roughly equal to the diameter of a shilling piece.

#### THE HALF-TONE

The half-tone process block is the next for consideration. It was explained in the previous chapter how the surface of this type of plate must be broken up into dots before it is possible to obtain a reproduction of a drawing in tone. Dots or lines on the surface of a printing plate represent light which has passed through the photographic negative, and the non-printing area represents light which has been prevented from passing by the densest parts of the negative.

If we imagine a garden trellis-work with the light of a strong sun shining through it, and at the same time casting a shadow of the trellis (intercepted light), we shall get a good idea of the principle by which the negative is produced for printing down on the half-tone plate. The main difference is that the light reflected from the original to be photographed will pass through the spaces in the "trellis" in varying degrees of strength.

# THE LEVY SCREEN

The negative is made in the same way as in the line process, but with an addition to the camera. This addition is known as the Levy screen and is placed between the sensitized plate and the lens. It is made up of two sheets of glass, etched with parallel straight lines, which lines are

filled with an opaque pigment. The width of the lines is equal to the space between them.

The sheets of glass are sealed together, with Canada balsam, in such position that the lines are in contact and cross at right angles. The lines are etched on the glass sheets at an angle of forty-five degrees.

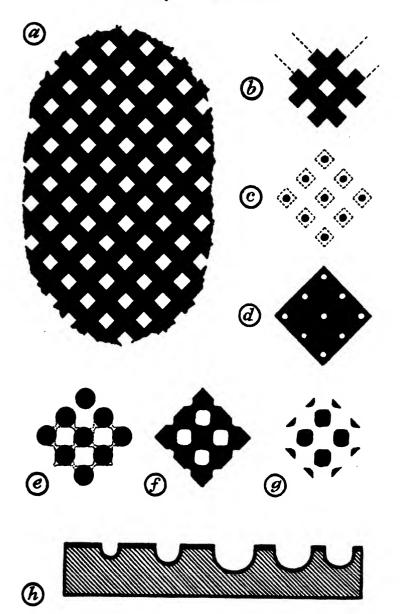
It will be realized that when the plate is exposed, the picture will be broken up by the screen lines, while the light passing through the rectangular spaces bordered by the lines will act upon the sensitive covering of the plate in varying degrees—strong light making a large dot on the negative and weaker light a smaller dot. Remember that these dark dots in the negative will be lights in the print.

In order to attain a faithful rendition of tonal values, the screen must be placed at the correct distance from the sensitive plate. If placed too near, the negative would be "flat" and the resulting print lacking in clear, wellgraduated tones-it would lack "contrast." With the screen too far away, its effect would be nullified. No trace of screen lines would appear on the negative, and the print would come up like an under-exposed photograph and with unbroken tones—an impossibility from an engraving point of view.

With the screen at the correct distance, we get a certain amount of irradiation with the stronger lights—a "spreading" of the light after it has passed through the screen apertures and strikes the surface of the sensitive plate. In this way, with the very strong degrees of light, we obtain a dot which is really larger than the aperture of the screen. In a very brilliant high light, each of the dots, in spreading, will overlap others contiguous to it, and in so doing will cut up the lines of the screen. This will be seen if a half-tone reproduction be examined under a magnifying glass.

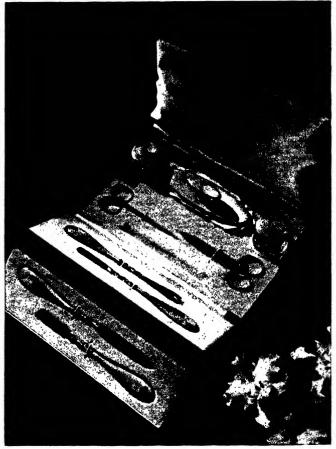
For our shadows, we have the lines of the screen as a basis. The weaker light reflected from these darker portions of the original will make much smaller dots on the negative, and in the very darkest parts of the original, from which next to no light is reflected, the negative will be left clear, massing up with the lines of the screen.

Making a print from our negative on to the metal plate, we shall have a picture showing a middle tone in the form



The half-tone printing plate. (a) Portion of a Levy half-tone screen, greatly enlarged. (b) Showing the "pitch" of the screen, equalling the combined width of a line and a space. Space and line are equal in width, therefore the measurement of either in a block of 150-line screen would be only one three-hundredth of an inch. (c) The dotted squares represent transparent openings in the screen. The black spots are the impressions made upon the negative by weak light reflected from a shadow portion of the subject to be reproduced. Darks in the negative are lights in the print, therefore a print of negative (d) will show this shadow portion as a broad black, broken by small white dots. (e) Here we see much larger dots produced by a stronger light reflection. These highlight dots will commence as round shapes on the negative, but as they grow larger they become square and join up with each other at their corners. The full development of this is shown at (f)—a highlight portion of a negative. A print from this minute section of negative will produce on the block the highlight formation as shown at (g), small black dots surrounded by a great deal more white space. The densest part of the shadow of the screen, represented by the dots in the print, occurs under the intersection of the screen lines. It is under the "free" section of the screen lines that the dots of the negative join at their corners in the highlight formation. The size of dots in the middle tone of the negative will be such that they do not link up. and will produce a print in which the screen formation will be plainly visible. A cross-section of a printing block is shown at (h). Etchedout depressions represent "light," while the raised portions will produce printed dots of differing size, thus conveying the impression of graduated tone.

of a reproduction of the screen lines, the lines enclosing white dots of large size—comparatively speaking. In the shadows we shall have what is virtually a thickening up



FINE HALF TONE (PHOTOGRAPH)
By courtesy of The Sun Engraving Co., Ltd.

of the screen lines, or in other words, smaller white dots enclosed by the screen mesh. The deepest shadows, reflecting practically no light, will simply show black which, of course, will merge with the lines of the screen. In the high lights will be found small dots—the remnant

of the screen which has survived the strong irradiation of light.

The action of the screen can be rather puzzling and therefore the above might possibly help us reach a fuller understanding of the principles involved. A good grasp of these principles involving negatives, positives and screens will be a help towards an understanding of other processes.

#### **BURNING-IN AND ETCHING**

Now, to get along with the making of the half-tone plate. After the copper plate has received the print on its sensitive surface of bichromated fish-glue, it is placed in cold water. This dissolves the soft portions of the fish-glue—those represented by dark spots on the negative and which have not become hardened by the action of light. After all this surplus coating has been sluiced away, the image of the original is left as a coating on the plate, the rest of the plate being bare metal.

This image is, however, not very distinct. In order that it may be seen that the print is up to the required standard, the plate is treated with a violet aniline dye, which, poured over its surface, colours the image and brings the tiny detail into vision.

After washing and drying, the plate is held over a flame for "burning in." This "burning in" converts the coating on the dots into an etch-proof enamel. Great care has to be exercised during this part of the process, otherwise there is a danger of the resist being burned. As a final preparation before etching, the plate is cleaned in order to be sure that there is no covering of any kind on the metal which is to be removed, and as in the case of line work, the back and edges of the plate are treated with a resisting varnish. It is obvious that this must be done, otherwise—good-bye plate!

The prepared copper plate is now placed in the etching bath, which, in the case of copper, is composed of ferric chloride. The unprotected copper is etched away, and after much skilful work, which includes careful watching of the dot formation, delicate control of the etch, hand finishing and routing, the plate is mounted on its wood block and is then ready for use.

Having very generally disposed of the methods by which half-tone and line blocks are produced, let us consider the circumstances under which they may be successfully used.

#### SPREAD

In letterpress printing there is a certain amount of spread. This is due to the fact that when the ink roller passes over the printing surface, it deposits ink not only upon the face of the printing type or plate, but to a small degree on the sides of the "hills," i.e. lines, dots or type. When the inked surface comes to print, the pressure applied transfers to paper not only the ink on the intended face of the printing surface, but also from the sides of the letters, dots and lines. Thus we get "spread"—an impression

slightly larger than the actual printing face.

To a small extent we have to put up with this in the best of printing; it is inseparable from the method. It can, however, lead to dire results when the paper chosen is not fitted for use with the grade of block to be printed. If we set out to print a line block including very fine and close detail, or a half-tone with minute dot formation, upon a loose, soft and spongy paper, we should be asking for trouble. With the great absorption of ink by the paper, picking up of particles from its surface and the pressure that would be required on the machine, we should most likely produce a scabby mass of filled-in black in place of the fine close line detail or tiny dot graduation seen in the original.

In the case of newspaper advertising, we are dealing mainly with a cheap and spongy paper, therefore, good open line blocks are to be recommended. If half-tones be used, the screen must have the same desirable "openness."

# SCREENS

By "openness" of screen is meant the distance between the dots. The nearer the dots are together, the smoother will be the surface of the paper needed for the printing of that particular half-tone plate. The "pitch" of the screen is the distance from the centre of one opaque line to the centre of the next, and varies for screens in general use from 55 to 175 lines to the inch. This means, that on a block of 100 screen, there could be a maximum of 10,000



COARSE HALF TONE (WASH DRAWING)

By courtesy of The Sun Engraving Co., Ltd.

dots to the square inch—and every one must be printed in order to obtain a first-class result.

Let us see how the choice of paper enters into the attempt at attainment of this ideal of perfection. In theory, our ideal printing surface will embody units—lines, type faces, or screen dots—which are absolutely in the same plane. The ideal paper will have an absolutely flat surface. If this were possible of attainment, every portion of the plate would be sure to come into contact with its opposite number on the paper, and we should get the finest reproduction by means of the lightest of "kiss" impressions.

But no plate is absolutely in plane, and the most perfect paper available will vary in thickness at different points on its area. With a paper of the cheapest newsprint type, not only will it vary in thickness, but its surface will be rough—hills, plains, valleys, craters, and not a few slagheaps. These undulations and depressions are small in themselves, but it is a case of a steak pudding being a mountain to a gnat.

Using a block of, say, 120-line screen on such a paper, we should have minute sections of the printing face bridging these depressions. The dots between the "supports" of the bridge would not print at all under normal pressure. It will be appreciated why a 55 screen would give better results. It is similar in principle to the long wheel base in a car—the bumps are absorbed.

For the better-class magazines, in which the paper is smoother, we should be safe in using a screen of 120 or 133. Coming to higher-class work, or illustration of technical or scientific character, in which the detail must be the clearest possible, we may use blocks with screens of anything from 133 to 250—although 175 is about the ordinary commercial limit. Their use calls for the finest procurable surface. The "art" papers, as they are called, are given their superfine surface by coating with certain materials such as china clay and barium sulphate, which have the effect of filling the pores and "cementing" the fibres. After calendering—being passed between rollers—the surface reaches a high degree of smoothness.

There are many screens and many kinds of paper. If in

any doubt about the screen to use for an advertisement, get into touch with the office of the publication concerned. When not too sure of either the screen or paper, learn by experience—the experience of your printer and process engraver. These people will be only too glad to help.

#### THE THREE-COLOUR PROCESS

Half-tone reproduction in full colour is made possible by the three-colour process. Yellow, magenta and blue-green are printed successively in register and in the order named, the various strengths and blendings giving a good range of tints and shades. The screen is used as in the case of monochrome blocks, but the angle of ruling is different for each colour. A fault known as a "moire" effect is caused when the dot lines cross at too narrow an angle.

To separate the three "primary" colours and lay each down on a separate block, colour filters are used with the camera. A blue filter is used for making the negative for the yellow block, green for the magenta printing colour, and red for the blue-green plate—the filter colour being the complementary of the printing colour. Where extra depth is required in the shadows or when a pure and delicate grey is incorporated in the original design, a fourth block of grey or black may be necessary, in which case a vellow filter will be employed. The additional block is sometimes used for the reproduction of extra brilliant spots of colour, when likely that full justice cannot be rendered by means of the normal method of three-colour overprinting. The foregoing is a simple sketch of an extremely delicate job which calls for the closest co-operation between printer and blockmaker.

# ORDERING BLOCKS—POINTS TO WATCH

Turning now to the ordering of blocks. The first consideration is that of dimension—the size required. We should have already decided upon the approximate space at our disposal in which to accommodate an illustration. When the original photograph or drawing is made, it should measure about one and a half times to twice the linear measurement of the illustration as reproduced in the advertisement. This means that the reproduction

would be two-thirds or half (as the case might be) of both length and width of the original drawing. In the process of photography, this reduction has the effect of sharpening up the picture and reducing the unpleasantness of any small irregularities which might be present in the original.

When the drawing has been made larger in exact proportion to the size of the illustration required—as mentioned above—it will be sufficient to instruct the blockmaker to reduce to two-thirds, half a certain dimension, or whatever the figure might be. By this means we get a block which will exactly fit the space mapped out for its reception. On the other hand, we might come across a drawing which fulfils our ideal of technique and treatment of the subject. It has, however, not been drawn proportionate to the space. The width at our disposal is 4 in. and the original measures 9 in. Before giving the instruction "Reduce to 4 in. wide," we should know the depth or length of the block resulting from this reduction. It will be seen that this is a reduction to four-ninths of both length and width, and if the drawing were 18 in. by 9 in., the block would measure 8 in. by 4 in. All measurements are not so convenient as in this example, and so we use the following method to ascertain the length of the block when reduced to a certain width, or vice versa.

## MEASURING ORIGINALS FOR BLOCKMAKING

Cover the original with a sheet of tracing paper. Should the drawing be squared up we can proceed, but should it be irregular, construct a rectangle on the tracing paper which will just enclose the drawing. Between the opposite corners of the rectangle, draw a diagonal. We have, now, two right angled triangles—one standing on its base. Measure along this base, from the "diagonal" end, the width of the block required. From this point, erect a perpendicular line. The point at which this perpendicular cuts the diagonal will be the depth of the illustration when reduced to the given width.

Instructions as to size should be indicated not only by the measurement figure, but the direction of reduction width or length—should be shown by means of arrows. The face of the drawing should not be marked, and it should be remembered that heavy-handed writing on the back of the drawing or photograph, if on thin paper, will show through it and consequently photograph. It is best, in every case, to cover the original with transparent paper, attaching it very carefully to the top edge with a little paste, and to write all the particulars on this.

The minimum charge for making a block is based on an area of 14 sq. in. A block 2 in. by 1 in. would cost as much as one measuring 4 in. by 3½ in., as the minimum charge is

for 14 sq. in.

When two or more small blocks of different subjects are required, it is possible to save money if the drawings will allow of uniform reduction. They can be photographed on the same plate, provided of course that they are all line or all half-tone. Room must be left around each subject to allow for cutting, and a small charge per subject is made for separation.

If the block you are ordering is a half-tone, you must give instructions as to its form or finish. It can come as a square, a circle or an oval—with or without a surrounding line. When the background is entirely cut away, it is known as a cut-out or silhouette half-tone. If "vignetted." the background is faded away at the edge as seen in some portraits. In the case of a vignetted block, the depth of the vignette should be indicated by arrows on the transparent paper, together with any other instructions.

## HIGH-LIGHT AND DEEP ETCHED HALF-TONES

Before we leave the half-tone "original," just a word about two special types—the high-light and the deepetched half-tone.

The first, as its name implies, prints the high-lights pure. In the ordinary block, we find small dots making up a faint tone in the brightest high-lights, due to the paper not photographing a dead white. In a high-light half-tone, this screen-tone which flattens the bright lights is etched away, giving finer contrast and cleaner definition to the reproduction.

The deep-etched half-tone is a block which has been given greater depth—in other words, higher dots. This enables it to be printed on a coarser paper than would

otherwise be possible.

The word "high-light" describes the first block quite well, while "deep-etched" covers the other. These descriptions have been used above in the interest of clarity, but it should be noted that the "high-light" is called "deep-etched," and blocks used for printing on rougher paper than is normal for the screen are known as "deep" halftones. Motto—tell the process engraver exactly the effect you require and for what the block is needed.

Reverting to the line block, interesting simplicity should be the strength of the good pen drawing. The simplest form is just a matter of unadulterated outline, which, in certain instances and worked with an appropriate type face, can be quite charming. This, however, might not be sufficiently interesting in all cases.

### USE OF MECHANICAL TINTS

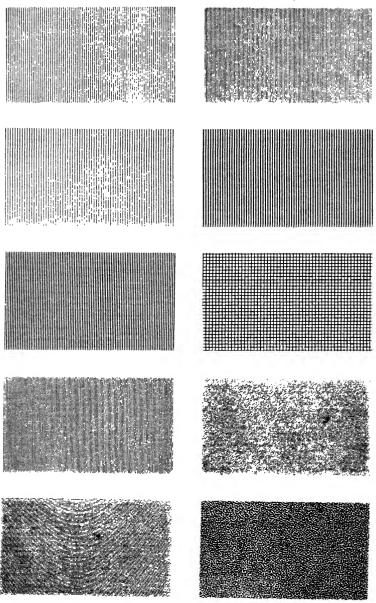
A pleasing effect may be obtained with a simple outline drawing by the addition of mechanical tints known as Ben Day's Medium. There are a great many of these tints available, and their variety is very wide. They take the form of dots in different sizes and formations, lines straight and wavy, spatter work, tartans, herringbones, screens, cross-hatches, wood-engraving effects, and crinkly textures.

Care must be used in the selection of these tints, and too many should not be used on one drawing—otherwise the effect is liable to be reminiscent of a badly dressed and overloaded Christmas tree.

The process engraver lays these tints down on the block by mechanical means. When the block is etched, they become part of the design. The tint may be "reversed" by means of impressing it upon the negative instead of direct on to the metal print. The effect of this "reverse tint" is to make—for instance—the black dots of the tint white, and its white background black.

Instructions for laying should be shown on a tracing of the drawing, the area to be covered by the various tints being plainly marked in blue pencil, and the engraver's own reference numbers being quoted.

In certain instances it might be necessary to tone down wide areas of black. This might be due to desire or compulsion. Many publications will not accept illustrations



BEN DAY TINTS
From the extensive range of The Sun Engraving Co., Ltd.

carrying very large areas of solid black, not only on account of the overpowering effect on other advertisements, but also because of the likelihood of unsatisfactory printing on the fast-moving rotary presses.

#### HALF-LINING

When white lettering is used on a solid black background, there is also the tendency for the letters to become ragged and to fill up, particularly if they are on the small and thin side. Such heavy black areas would be "half-lined"—reduced from full black to a "tint" composed of alternate black and white parallel lines.

A block may be made entirely in half-line or only part of it may be greyed down. As an instance, a drawing might show a composition of figures with a landscape background. Desiring the figures to stand out strongly, we instruct that the background—trees, etc.—be treated with half-line screen.

### SAVING ON BLOCKMAKING

When you wish for line illustrations in two or more colours, it will always pay to employ a good artist who is well up in the requirements and snags of process work. A really competent man can do an astonishing amount with the use of only two colours.

Blocks for colour line work may be made from an original drawing in full colour, but in that case, not only must "colour separation" be paid for, but each block will be reckoned for measurement as the size of the largest, unless it be less than a quarter of the total area.

A saving of 2d. per square inch for each colour may be effected if colour proofs are not required, bringing the nominal cost per square inch down to the price of ordinary line work, but this is not considered advisable.

By making separate drawings for each of the colours, a substantial amount can often be saved. In such case, each drawing, being carried out in black, is reproduced as a simple line block and the cost of each block is based on its actual area. Your artist is working in your interest—or should be—and will be able, if he knows his job, to put you right on this point.

We have now dealt with the making of "original" blocks, both line and half-tone. These can be looked upon as "master" blocks—just as in the case of the gramophone record a master disc is made from which all subsequent copies are reproduced.

Seldom will we use this original or master for actual printing. If the job should be one of the highest class and the extra expense can be borne, it is open to us to use duplicate originals—blocks printed down on the metal plate and engraved in a similar manner to the first produced. Should we decide upon the use of duplicate originals, they should be ordered at the same time as the "master" block in order to earn a substantial discount on the duplicates.

În the majority of cases, however, it will suit our purpose to use what we might call "copies" in order to differentiate them from "duplicates." These copies are known as electros and stereos.

The advantages of such blocks will be readily appreciated. They enable the original to be kept as a permanent record, from which fresh copies may be taken when previous copies become too worn to produce good work. By their use, several pieces of the same composed matter may be printed on one sheet, and many printers, maybe living in different parts of the country, can be getting along with the job of printing at the same time.

## ELECTROTYPES

Electrotypes, as their name suggests, are produced by a method which involves the deposit of copper by means of electricity.

A piece of specially prepared wax is first dusted with plumbago or blacklead in order to prevent sticking. The face of the original block is then pressed into the wax, thereby making a mould. After careful removal of the block, the dusting with plumbago is repeated and the mould is then suspended in a bath containing a solution of copper sulphite, electrical contact with the mould having been previously made. The electric current, working through the solution, deposits copper upon the blackleaded surface of the mould. The copper, being deposited equally

over the surface of the mould, takes the form of a thin shell.

This shell is removed from the mould by the simple expedient of melting the wax. After the shell is cleaned, the back of it is covered with a sheet of tin foil, which, on being melted, forms a tin coating to which the backing metal will readily attach itself. The little tin-lined copper "vessel" is now filled with a support of molten stereo metal. When this cools, we have a strong, copper-faced printing plate which, after trimming, is mounted on its wooden block to type high, as in the case of originals.

Lead-moulded electros, in which the mould is made in lead under enormous pressure, give a truer reproduction of the original when dealing with half-tones. For this reason, they are eminently suitable for use in printing by the three colour process. The wax-moulded half-tone will, nevertheless, be quite suitable for printing the ordinary run of work which is to be produced in a single colour.

A wax-moulded electro would be used in place of a wood engraving or lino-cut, in order to save wear on an expensive or fragile original.

## THE STEREOTYPE

The stereotype is a cheaper kind of reproduced block, consisting simply of a casting taken from a moulded impression of the original. We cannot, therefore, expect the fine reproduction of detail that comes with the electrotyping process. For this reason, we should confine its use to line and coarse screen work.

The mould from which a stereo is cast is known as a matrix—commonly called a "mat"—and the material from which the matrix is made consists of a specially prepared paper composition which goes under the name of "flong."

There are two ways in which the matrix may be produced—the wet flong and the dry flong methods. In the first, the flong, having been soaked, is placed over the face of the block to be copied. The flong is then beaten with a stiff wire brush, which moulds the wet mass to the face of the block or type forme. Following this comes subjection to the action of steam, which has the effect not only of finishing the moulding process but serves as a drier.

The trimmed matrix, strengthened where needed, is now placed in the casting box into which molten metal is run, filling the mould and making the cast. When sufficiently cool, the stereo is removed from the matrix, trimmed, routed, and finally set up to the correct printing height.

The dry-flong method is somewhat quicker. The raw material for the matrix is a heavy paper "board" with a prepared surface. The method of procedure is as follows. A piece of flong is placed, prepared side downwards, on the face of the original, and a "moulding blanket" is placed over the flong. The whole is then run through a press under heavy pressure, and hey, presto!—the matrix is made! The casting process is, of course, the same as that used in the wet-flong method. Comparing the two methods, the dry wins on speed, but a matrix produced by the wet method will show greater fidelity to the original in the resultant cast.

### **NEWSPAPER STEREOS**

In passing, we might mention stereotyping as it is applied by the great newspaper presses. As might be guessed, they work for speed by the dry-flong method. Imagine a page of a certain paper, set up in type, with advertisements displayed complete with blocks, locked up in an iron frame (a "chase"), the whole constituting what is known as a "forme."

This "forme" of type and blocks will not be used for actual printing, but a stereo plate will be made of the whole. Unlike the ordinary stereo, which presents a flat surface, these plates are semicircular in shape in order to adapt them for fitting to the cylinders of the big rotary machines.

The matrix is made in the usual way, the whole forme of type and blocks being covered with dry flong and then rolled under pressure. This gives the ordinary kind of flat matrix. When placed in the casting box, the matrix, being pliable, is easily adapted to the bed on which it rests—curved in a semicircle. The casting box is so constructed that the correct thickness of plate will automatically be cast. Molten metal is pumped into this casting chamber from a melting-pot, the capacity of which runs

into tons. When cool, the plate is trimmed up so that its inner surface will correctly fit the cylinders, and is then ready to be fitted to the machine.

It will be realized that when dealing with newspapers or large printing houses in possession of a stereotyping plant, there is no real need to send blocks. A "mat" of the line or half-tone block—which may be obtained from your stereotyper—will be quite satisfactory if care be taken to make an efficient protective packing, otherwise it might be "one of the ruins" by the time it reaches its destination. This hint about adequate protective packing applies also in the case of blocks.

The screen limit for the common type of stereo is about 85 lines, but by the use of special flongs in the making of the matrix and hard metal for casting, blocks may be satisfactorily produced up to about 120 screen. When the screen of the original is finer than those mentioned for each circumstance, the use of electros is advisable.

### LIFE OF A BLOCK

The length of life of a block will depend upon its type—whether original, stereo or electro—the form of its finish and the paper used. A fine line or half-tone block will show signs of wear quicker than one of a coarser line or screen. A vignette of either line or half-tone will not stand up to as much as a square-finished block of the same type. Chemical action, due to printing inks also does its share in eventually rendering a block unfit for efficient use. The longer the run, the lower the power of resistance of the block, and the stronger become the attacking forces.

Nickel and chromium are two metals which are not only extremely hard, but will stand up to the erosive action of the ink. Stereos faced with nickel and copper blocks with either a nickel or chromium surface should be seriously considered when a long run is in prospect. Although chromium is the hardest known metal, it can be removed when necessary, to be replaced by a new coating. This resurfacing is not detrimental to the good printing quality of the block.

It is part of the job of the printer and blockmaker to know when it is in the interest of economy and good printing to use these faced blocks. As in the case of other involved technical matters, let their far wider experience be your guide. And so we pass on to outline the principles of methods and the preparation of surfaces used in planographic printing. The most important of these, using the word in the all-embracing manner, is lithography.

#### LITHOGRAPHY

Although lithography is usually associated with the production of posters, examples of this method of printing are to be met with in the form of cartons, labels, cigarette packets, greeting cards, calenders, display matter, and showcards. The printed surface may take the form of broad masses of flat colour, or perhaps broken tones may be seen, the graduation following the "grain" of the stone or plate. Whereas in a print produced by the three colour process the dots will be regular, in the toned portions of a lithograph they will appear irregular—a similar brokenness to that seen in a crayon drawing on grained paper. This applies, of course, to work directly drawn.

The surface on which the design is laid down can be either a stone or a metal plate. If we deal first with autolithography, that is where the design is drawn upon the stone or plate by the lithographic artist, we will grasp the

principle which applies generally.

The virgin stone or plate must have a grain or tooth. This can vary from very fine to rather coarse. In the case of plates, the grain is there ready to work upon, and after use the plate can be sent back for re-surfacing. If there is already a design on a stone, however, this must be removed and the stone ground down to sufficient extent which will ensure that there is no likelihood of a "come-back" of the old design when it comes to printing the new one.

The old manual method of graining the stone is carried out in the following manner. Flint grit, passed through a sieve in order to obtain a uniform graining medium of the required fineness, is sprinkled over the face of the stone and damped. Another piece of flat stone is then worked with a circular rubbing motion over the surface under preparation until the grain is sufficiently deep and uniform—work for strong, silent men! Modern methods include the use of the

power levigator and the stone-planing machine. In the case of metal plates, the abrasive is made to "cut" by means of glass or porcelain marbles which are sent rolling over the surface by the oscillating movement of the tray of the graining machine.

For direct printing, the design will be laid down in reverse on the stone. If the picture is in several colours, the number of workings—printings in separate colours needed to obtain the effect—must be decided upon. A "key" will then be made consisting of an outline tracing on gelatine showing the disposition and areas of the various colour workings—similar in idea to an outline map of England showing county boundaries. The lines of the tracing, scratched in by means of a steel point, are filled with transfer ink, surplus being cleaned away. This inked tracing is now laid down by pressure on the stone. After appropriate treatment the "keystone" is ready for use. As a guide for printing the various colours in their exact position, "register marks" in the form of right-angled crosses are ruled on the stone in lithographic "writing ink" at top, bottom and sides beyond the outside limits of the key design.

### THE "KEY" OFFSETS

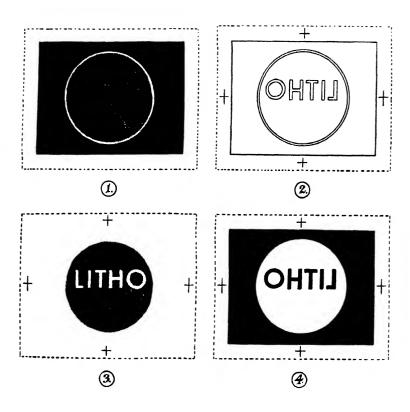
As a guide to the artist, the key complete with register marks is impressed on each subsequent stone, but in a medium which will not be permanent. This is accomplished by means of an "offset." An impression is taken from the keystone in black ink. The wet ink is dusted with an "offset powder." After surplus powder has been removed by the oscillation of silver sand over the surface of the paper, the design, now in the colour of the offset powder, is ready for setting off. Special set-off inks may also be used which, when the surface is treated with methyl alcohol, set off in methyl violet. Having made his offset, the artist proceeds to work on a particular colour or-to use our analogy—the "county" which the stone is to print. For the broad, flat, solid masses he will work with a rubbed-down litho writing ink or a prepared "tush," and for the graduated tone portions with a crayon known as litho "chalk." Whatever medium he uses, it will be of

a clinging and greasy nature. Only the parts of the design which the artist fills in will be the effective printing area. The offset lines of the key will not affect the surface and therefore will not print if—in the case of the dusting process—due care has been taken and ink has not been forced through the powder.

The use of the register marks will now be easily understood. When all the stones are completed and we come to printing, if register marks of a print at any particular stage are made to coincide with those on a subsequent stone, the colours will automatically fall into their correct position.

Now for the principle upon which planographic printing works. We have a stone or plate which will hold a design executed in a greasy medium. The stone is also capable of absorbing water, while the plate will hold it on its grained surface. When such stone or plate has been fully prepared, if we damp the surface the water will be accepted by the plain areas but will be rejected by the grease embodied in the design, owing to the mutual repelling action of grease and water. On the other hand, if we roll the damped surface with a greasy lithographic ink, the water will reject it while the greasy design will accept it. By alternate damping and inking, we make a printing surface from which an impression may be obtained each time the operation is repeated.

The pressure required to transfer the image to paper will be brought to bear in one of two different ways, according to the type of machine used. It can take the form of a scraping action, which can be illustrated by drawing the broadside edge of an ordinary foot rule down the length of a sheet of paper. Actually, on the machine, the scraper is stationary, the stone and paper moving. The second consists of a rolling action, in which our illustration would consist of the sheet of paper moving under a round ruler, which, although fixed for position, is revolving on its own axis. In the case of machines for printing litho-offset, which we will touch upon later, the paper is rolled between the impression cylinder and a cylinder carrying the design. The action of these cylinders can be appreciated by means of two pennies-place them edge to edge and revolve them in opposite directions.



When surfaces are to be prepared for planographic printing, the type of job will, to a great extent, dictate the method. The drawing may be made upon the stone, in reverse for direct printing or right way round in the case of litho-offset. On the other hand, it may be executed on "transfer paper" from whence it will be impressed on the surface. In such instance the drawing will be correct way round for direct but in reverse for litho-offset. "Patching-up" and other means of manipulating transfers might enter into the method of

placing the successive "colours" in their correct position. These diagrams are, however, intended simply to convey an idea of the general principle of colour separation in planographic printing, together with the means of obtaining "register"—correct superimposition of successive colour printings-by means of an outline "key" of the original copy. In the accompanying figures, the dotted borders represent the paper area or the dimensions of the stone. Consider Fig. 1 as the "copy" which is to be reproduced by means of direct litho printing. The lettering and outer ground are in solid colour, while the inner ground is of a crayon-like texture. If it were decided to reproduce in one colour only, the whole would be laid down on a single stone or plate, the solid portion in lithographic "writing ink" or a ready-made "tush," and the broken tone through the medium of litho "chalk." The resultant print would show the solid lettering on a tint of its own colour—diluted by the tiny patches of interspersed white. With the outer ground also in solid, the print would be made up of two tones of a single colour.

Let us now imagine that we are dealing with a design of more than one colour. Keeping to our simple example, let us decide that the chalk-drawn tint is to be printed in a second colour. This will entail two workings—the preparation of two separate "working" surfaces, each carrying certain parts of the design which are of a common basic hue. How are these separate extractions from the design to be laid down on their respective surfaces so they will print in correct relative position, thus producing a complete and accurate reproduction? The last three illustrations will help make this clear. Fig. 2 may be looked upon either as a "keystone" or as a preparatory "offset." The following processes may be connected with it: (a) Tracing made on gelatine showing confines of component colours. (b) Scratched-in lines filled with ink; transferred to keystone; register marks added. (c) Pulls taken from keystone and dusted with offset powder. (d) Offset or "faint" made on surface to be drawn upon—process repeated for each new colour. (e) Colour laid in to strength needed for particular area. In the case of more complicated work involving overprinting of two colours in order to obtain a resultant third, the strength of a particular area becomes a matter for fine judgment. Now for register. Remember that by the use of the offset key we fix the position of each part of the design relative to the register marks. Think of Fig. 3 as a print from our first colour about to be laid on the second surface shown at Fig. 4. The paper will be guided into position by means of needles set in short wooden handles. Tiny, shallow holes will be drilled in the surface of the stone or plate at the intersection points of the register marks. The similar centres on the paper having been pierced with a sharp needle, the blunt register needles are now passed through the register marks on the paper, from the back, their points being rested in the holes in the stone or plate. The paper can now be carefully lowered into position. The preparation of the surface after the design has been laid down includes plenty of technical detail, which in certain cases is open to variation. We will therefore take one or two of the many interesting stages. The main purpose of preparation is to strengthen and reinforce the image, to keep the non-effective areas clean and to add to their ink-rejecting capabilities.

"Gumming up" consists of covering the whole surface with a solution of gum arabic. When this is dry, it not only acts as a protection against finger marking and other soiling, but prevents the spread of the image, helps to desensitize the non-printing surface and assists in holding water. As a point of interest, if we took a plain plate, "painted" a design or lettering with the gum as a medium and then, when the gum was quite dry, rolled the plate up, we should have a white design on a black background after washing the plate.

The surface undergoes an etch at one stage. After rolling up, it is dusted with either resin or french chalk. This adheres to the ink and acts as a resist.

The original design is, of course, carried out in black greasy pigment. When the time comes for printing in colour, the surface is rubbed over with turpentine, which leaves it without sign of pigment but with the design showing faintly in a silvery-grey greasiness.

Damped and rolled up in colour, the design gradually returns until very soon it is back in full body.

## PHOTO-LITHO

As in the case of letterpress blocks, a hand-drawn original or a photograph may be laid down on the stone or plate by means of photography. This is called *photo-litho*. The principle depends upon the hardening action of a sensitized surface by light and is similar to that exploited in the production of line and half-tone. The image may be transferred to the surface or can be printed down direct.

The first stage of the transfer method is the making of a direct negative—not reversed as in the block processes. The negative is then printed down on to a paper which is coated with bichromated gelatine. After being rolled up with photo-litho transfer ink, the print is wetted and the

soft gelatine rubbed away, leaving the image in the form of light-hardened gelatine with a surface film of transfer ink. After this image is set-off on to the stone or plate, the preparation of the surface is carried out in the usual way.

A quicker method is that in which the image is printed direct on to the plate, under a reversed negative. The after development of the surface follows generally along the lines already described for the preparation of the transfer. Extremely clean and sharp detail can result from the use of this method, particularly on stone which has been given a smooth and polished surface.

In the case of continuous tone subjects, a screened negative would be used as in the case of photography for the half-tone block process.

Up to now, we have dealt with surfaces for printing on machines which make an impression on paper direct from the prepared surface.

Type and its accompanying blocks of line and half-tone in their original form may be printed either on a "platen" press or on a flat-bed cylinder machine.

With the platen machine, we have two flat surfaces—first the forme, then the platen on which the "lay" for correct printing position is made. For illustration, take a book and open it half way. The vertical portion represents the forme, while that which lies horizontally is the platen. Imagine the forme inked and a sheet of paper placed in position on the platen. Still holding the one section vertically, close the book. That will give *some* idea of how the platen press operates.

We have already given an inkling as to the working of the flat-bed cylinder machine, in which, for simplicity in comparison, we made the paper move under a round ruler. In actual working, the forme, clamped in the flat bed, moves back and forth, and the paper is brought into contact by means of the revolving impression cylinder, around which it is made to lie closely after being picked up from the feed board by means of grippers.

The third type of machine is the rotary, in which the printing and impression surfaces are both cylindrical and revolve in opposite directions. The curved printing surface takes the form of stereo plates already mentioned, as it is

evident that type and blocks in their original form cannot be used on a rotary.

Back to lithography and the type of machines used for printing direct from the stone or plate. First we have the simple hand or proofing press. When operating this, the rolled-up stone is placed on the bed, or, in the case of a plate, the plate is placed on a stone resting on the bed. The sheet to be printed, with a light packing of additional paper is placed on top, and the tympan—a hinged frame enclosing a flexible metal diaphragm—is lowered over the whole. The stone is run slightly forward, by means of a turning handle, until a small portion of it rests under the "scraper." Pressure is applied to this bar through a screw at the top of the machine. The stone is now moved steadily forward under the pressure of the scraper and so the print is made.

The direct flat-bed and the direct rotary machine for lithography are similar in principle to those used for letter-press but with the addition of rollers for damping the surface. The one prints off a level surface on to paper "wrapped" temporarily around an impression cylinder, and the other from plates bent around the plate cylinder under pressure from the impression cylinder.

## LITHO-OFFSET

Opportunity should be taken of seeing these rotary wonders at work; some of them are capable of printing back and front of the paper—"perfectors"—besides several colours at one operation.

In dealing with the transfer method of laying down the image, we saw how it is first printed down, the right way round, on transfer paper, then set off in reverse on to the stone or plate which will finally transfer the image to paper the right way round. A similar principle obtains in the "indirect" method of printing known as *litho-offset*. The litho-offset machine, whether flat-bed or rotary, has an additional rubber-faced cylinder—the "blanket."

For printing litho-offset, the design is laid down the right way round—not in reverse as in direct printing. When on the machine, this surface is inked and damped in the usual way, but the impression is not taken from it

direct. The inked image is transferred from this first surface to that of the rubber blanket from which it is

impressed on to the paper.

It might be asked as to what is the advantage of this indirect method of printing. The printing surfaces which we have dealt with up to now have been hard and rigid, whereas this rubber surface is resilient. This resilience enables the blanket to "search" the surface—no "bridging" as in the case of fine half-tone blocks on a rough paper. The rubber can mould itself to both setting-off surface and paper, enabling it to pick up the maximum amount of ink from the image and to transfer it to paper in an equally adequate and satisfactory manner. For this reason, the most delicate subjects may be printed on rough papers by means of litho-offset. Softness of colour is another outstanding feature. It might be termed a calm, delicate glow.

Mention has been made mostly of design, but it should be noted that type can be satisfactorily laid down and printed

by means of lithography.

## COLLOTYPE

We now come to a planographic method which enables a picture in tones to be reproduced without the use of the half-tone screen.

This is known as collotype, and although it cannot be generally considered as a usual commercial method except for short runs, quite beautiful work can be produced by its means. It is sometimes used for the illustration of catalogues, the pictorial reproduction of objects of art, and with lithography as a reinforcing medium, for the production of picture postcards.

The printing surface is prepared in the following manner. A thick sheet of plate glass is given a roughened surface by means of emery powder. This surface is then coated with a ground which may contain potassium silicate, sodium silicate, albumen and even ale—another instance in which "beer is best." This first layer is meant to supply the "tooth" to which the gelatine printing surface can adhere, and the malt in the ale helps attach it to the glass.

The plate is now given a light-sensitive film, consisting

of a solution of gelatine and bichromate of potash, and is then dried.

When this sensitized surface is exposed under a negative, the gelatine is hardened in varying degrees, according to the amount of light passing through different parts of the negative. Remember that in the case of the negative, transparency means shadows, and the opaqueness represents lights. After exposure, the plate is washed for the removal of free bichromate and is then dried. It is now ready for printing and will appear colourless, with a slightly reticulated surface, and with the design showing faintly.

Preparation for printing consists of treatment with a concoction of water, glycerine and ammonia. This is accepted or rejected by the gelatine in proportion to its softness or hardness, the "light" portions absorbing, of course, more than the "dark."

When the plate is rolled up, the collotype ink is accepted in varying proportions by the harder parts, and rejected in like manner by the softer portions. So, in printing, we obtain our graduated tone picture without the use of the half-tone screen. The machine used is similar to a litho press—"scraper" or flat-bed.

Very rich results in colour are capable of being produced by means of collotype, but owing to shortness of possible run and the extreme care needed in order to ensure uniformity of result, it is not yet a process for ordinary common commercial use. Nevertheless, magnificent collotype work is turned out. Opportunity should be taken of seeing examples, and its possibilities kept in mind.

Before leaving the planographic processes, let us deal briefly with mercuriographic printing. Just as lithography depends upon the mutual unfriendliness of grease and water, so do the mercury processes exploit the repelling action of mercury against printing ink.

# THE PANTONE PROCESS

The Pantone process is one of this group, and although seldom used at present, a description of this ingenious method will be of interest, and an understanding of its principle will help towards an appreciation of any further developments which might possibly come to notice.

Five metals are employed in the production of a Pantone plate—iron, copper, chromium, silver, and mercury. The iron base plate is first coated with an electrolytic deposit of copper. This is surmounted by a facing of chromium which is the metal from which the print will finally be made. This iron-copper-chromium plate is given a light-sensitive film of bichromated fish glue which is exposed under a negative, screened or otherwise, as in the line or half-tone process. After the usual protective treatment of the image, the plate is given an etch with hydrochloric acid. The extremely thin facing of chromium is etched away, leaving the copper which is impervious to the action of this particular acid. We now have a chromium design with a copper surround.

At this stage, the plate undergoes a silver-depositing process, this metal adhering to the copper but being rejected by the resist-covered chromium. To finish the process, the chromium-silver surface is rubbed over with mercury or mercurial powder. The mercury "takes" on the silver but is repelled by the chromium. The ink used for printing has a certain content of mercury, which has the effect of keeping the non-printing surface up to ink-rejection scratch, and level with the general surface of the plate.

We now have as real a planographic printing surface as any lithographic stone or plate. The ink is accepted by the chromium, but rejected by the mercury, and the "damping" is carried out by renewal of the non-printing or

rejecting surface by the mercury in the ink.

The aim of Pantone is to enable lithographic printing to be carried out on a letterpress machine, with type-high blocks, and side by side with ordinary type. Fine screen blocks have been printed on very coarse stocks by this method. I have in my possession a pull of a block of 133 screen, printed on my own pocket handkerchief about the time of the introduction of the Pantone process.

Other advantages claimed are that no "make-ready" is needed (i.e. packing placed on the impression cylinder, or under blocks, in order to ensure even impression), also that the printing face is almost everlasting in wear. Maybe, the day will dawn when we shall see a refreshed Pantone deservedly come into general commercial use.

#### INTAGLIO PRINTING

Lastly, the intaglio process, the simplest example of which is the "copperplate" visiting card. The lettering or design in this case is etched into the face of a polished copper plate, the bed of the etched channels being scored with fine lines in order to form a gripping agency to hold the ink. The whole of the plate is inked, the surplus being wiped away from the surface, while care is taken that no ink is inadvertently removed from the printing "valleys."

When under pressure on the press, the face of the card is forced to a slight extent into the ink-filled incisions on the plate. On removal of the card, an impression or more correctly a "pile" of ink, which has considerable height above the surface, is left on the card.

### THE ROTOGRAVURE PROCESS

The intaglio method which mostly concerns us from an advertising point of view is known as rotogravure. This is an adaptation of photogravure, for printing from etched copper cylinders by the rotary mode. Both photogravure and rotogravure print from a sunken surface and make possible the production of pictures in tone by means of the intaglio process. Their difference is that photogravure printing comes from flat plates—which, however, may be bent for use on a cylinder machine—while rotogravure employs etched cylinders. Also, that in the case of the former, finely powdered bitumen is used as an "etch stopping" to preserve a tooth or wiping "resist," being fused on to the plate by heat, whereas the rotogravure resist takes the form of a raised network screen.

Rotogravure is infinitely more speedy, and it is this process which is used for the production of commercial "photogravure," including the sepia-photo supplements which are sometimes enclosed in newspapers and other publications.

Here is a brief description of the method employed in making a rotogravure cylinder—and it is here that we must keep a clear head with regard to our negatives, positives and screens.

First let us realize that light in a printed production is represented by absence of ink and also, that whereas in a line or half-tone block the lights are removed, in the case of an intaglio plate it is the darks that receive the etching.

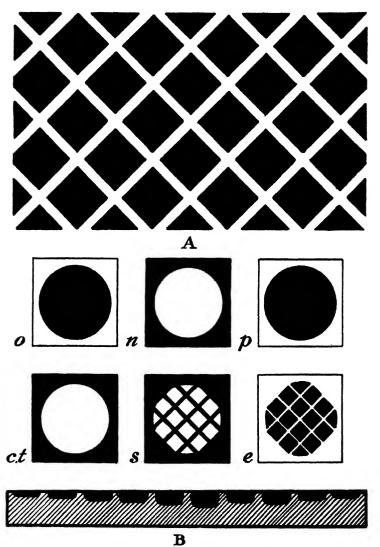
How can this come about? Remember that light hardens a sensitive surface and that lights are "hard" on a negative while "darks" are soft. This is reversed when we print the positive—the darks are hard on our process block or collotype plate and the lights are soft. On the surface of these particular plates we have a positive.

In the instance of photogravure, a carbon negative is laid down on the plate. When the plate is etched, the metal is attacked soonest where the gelatine of the negative is thinnest, i.e., in the shadows, and the action is delayed most where the film is hardest—in the highlights. Thus we get a proportional etch which gives graduation of tone.

When dealing with rotogravure, we at last come to this principle but through additional processes. A negative is first made, and from this negative a positive is printed down on transparent celluloid. From this positive, another negative is made on a gelatine-surfaced paper which goes by the name of carbon tissue. This image is now exposed under a reversed screen—white lines on an opaque ground—which forms a "hard" network over the whole picture. This is to be the "resist" or screen, which differs from the ordinary half-tone screen in that the width of the spaces is not equal to the thickness of the line, but is in excess by a ratio of about four to one, and also that it does not print, being simply the "wiping" surface.

The carbon tissue, wetted, is made to attach itself to the copper cylinder and is then dried. A bath with warm water detaches the paper backing, leaving the carbon resist on the cylinder. (Note that the word "resist" may be used in two senses—a substance attached to the surface of a plate to be etched, which will resist the action of the mordant, and to describe the "screen" of a rotogravure cylinder.)

The etch is now carried out through the carbon negative, the acid biting to varying depths according to the differing thicknesses of gelatine. The finished cylinder, viewed



The process of machine gravure. (A) The rotogravure screen. Light passing through the transparent portions hardens a corresponding network of area on the sensitive surface beyond. This hard 'print" of the screen resists the action of the etching medium, thus forming a guideway over which the "doctor" blade may run, removing surplus ink and leaving the network of "wall-tops" as clean, non-printing metal. The following six figures aim to show the "Positive and negative" steps in the production of a rotogravure printing surface. It should be remembered that, in the case of a halftone block, a positive is laid down on the plate and therefore the lights are etched while the portions to be inked remain in relief. The reverse is the case with gravure; a negative is laid down on the metal, and the printing "darks" are etched below the surface of the plate. Imagine Fig. (0) as an original tone, simple or complex. A negative is made, as at (n). From this negative, a positive (n) is then printed on transparent celluloid. A further negative (c.t), which is to be laid down on the plate, is now printed from the positive on to a papersupported, light-sensitive gelatine which is known as carbon tissue. (8) The carbon tissue negative print is now exposed under the screen (A), forming the light-hardened network. With this carbon resist attached to the cylinder, the metal is ready for etching. Deep shadows in the original are represented by the thinnest and most transparent parts of the negative. The mordant attacks these first and therefore they are bitten deeper than lighter portions of the original, which will be more solid or opaque in the negative. Thus is formed a printing surface in honeycomb formation, with cells or cups of similar superficial area but which differ in depth. The blacks at (e) are the etched portions, which will vary in depth, (according to weight of tone), as shown in the highly magnified cross-section of plate at (B). Graduation of tone is brought about by variety of height of the "piles" of ink deposited on the paper and their consequent relative density.

under a strong magnifying glass, will have the appearance of a honeycomb with tiny square cells, all of the same size but of different depths.

In printing, the entire surface of the cylinder picks up ink, and with the level "wall-tops" of the resist as a guide, a flexible steel blade called the "doctor" removes the surplus, leaving a clean, non-printing screen which encloses in its meshes the cells filled with ink to their different depths.

The paper to be printed passes between the etched cylinder and a rubber roller, the pressure from which transfers the ink to paper by what might be termed a kind of vacuum-suction action.

In the previous chapter it was pointed out that an illusion of tone depends upon the interplay of light reflected from the paper with the weight of deposited ink. This is particularly true in the present case. With the rotogravure picture we have innumerable "piles" of ink of differing thicknesses or heights above paper. The thinner the deposit of ink, the more the light which is able to shine through from the paper. The softer the gelatine of the negative (shadow), the deeper the etch, the thicker the deposit of ink and the darker the tone.

As there is no "show-through" due to impression, as in letterpress printing, it is possible to use a light and inexpensive paper. The paper usually employed is absorbent to a certain degree, with a calendered surface—smoothed by means of rolling. It is when the paper reflects just that requisite amount of light that we obtain the full charm of this manner of intaglio print—a beautiful velvety glow in the tones.

Not only pictures but type matter may be engraved on the cylinder. This makes rotogravure a useful additional vehicle for carrying the message of the advertiser. The method, as everything else, has its critics. Some say that the lights are washy, others that the tones are muddy, and included type matter is slated for being, to a certain extent, woolly—owing to the breaking-up action of the "screen." After all, every process "fails" in some way or another.

After all, every process "fails" in some way or another. We know that the surface of an original picture is not broken up in the way that a coarse half-tone shows, but it

makes a quite satisfactory impression, in two senses of the word. Rotogravure pictures can be very attractive and the text matter it produces is certainly readable. It is for the individual to decide whether it fills his requirements. With the majority of things in this world, what we lose on the swings we gain on the roundabouts—if not too roundabout.

Rotogravure in monochrome has its own charm, but it is with full colour that we see its maximum beauty. Some of the machines used for the production of these wonderful pieces of print—and they are wonderful, although familiarity is liable to breed indifference—have only to be seen at work to arouse admiration for the clever brains which evolved them, and for the thoughtful skill of our technical brethren who operate them. This goes for all the other processes of print and the crafts which are connected with it.

Six colours at one operation. Paper printed both sides without its being taken off the machine. Each printing dried by passing over a heated drum. This is little enough as a catalogue of detail of these splendid giants—but still enough.

## ANOTHER INTAGLIO PROCESS

Before closing, there is another type of intaglio process which we might consider. Although, with modern typography at a high artistic standard, we are able to produce, for instance, letter-headings by means of letterpress which are both businesslike and attractive, a relief lettering is sometimes preferred.

We can raise the lettering of our stationery or booklet cover by means of *embossing*. In such case, the matter is first printed and then raised by the use of dies or stamps which are in register with the printed matter. This method, however, is rather crude when compared with real diestamping.

In the case of die-stamping we have a male and a female die, the female being engraved and the male carrying the design in relief. The paper is raised into relief through pressure between the two dies. When printing, the colour is carried by the female die. If the work takes the form of

plain relief without the introduction of colour, it is known as "blind" stamping. Care must be taken in the selection of paper for use in this work. If not sufficiently tough and yet pliable, the paper is liable to be broken in the course of stretching or even to be cut by the die.

Lastly the quasi-intaglio processes which are classified under the title of thermography. What this amounts to is the raising of a letterpress image without "sinking" the back of the paper. A print is made and the wet ink dusted with a special powder. Subjection to heat causes the composition to rise and subsequently harden, giving an attractive and durable result which has the appearance of a piece of true intaglio or copperplate work.

### CHAPTER IX

#### INK AND PAPER

QUALITIES of a good ink—Special inks—Paper: types and qualities
—Loading and coating—Simple tests for strength of paper—
Size and subdivisions—"Work and turn" and imposition—
Calculating weights and sizes

To the ordinary man outside the craft of printing, black is just black and ink simply ink, irrespective of its colour. Nevertheless, it is surprising when we review the number and classes of black printing ink alone to be found in the list of any one manufacturer.

Your good printer knows his job, and so, when printing the illustration of your beautiful cut glass, set out on velvet and scintillating with flashing highlights, he will use a different black from the one which would be suitable for obtaining the best result from a wood engraving. He will even suit the ink to the screen when dealing with fine half-tone work.

Different ink will be used for jobbing work from that used on the newspaper press, while that employed for bookwork comes under a classification of its own. The choice of ink depends, to a large extent, on the class and quality of the paper used and the machine on which it is to be printed. For instance, an ink for use on the platen, full bodied and on the tacky side, would give excellent results with a paper of suitable surface. Such tackiness, however, could be a danger to a paper which was unsuitable, tearing one of poor quality or stripping from the surface of one which is coated.

## QUALITIES OF A GOOD INK

It is part of the printer's craft to judge the right consistency and clinging quality that must be embodied in the ink for any particular piece of work. In any case, good ink and the right ink is an investment in the long run. Accompanied by good craftsmanship, it must, of course, be paid for—but it pays. It is the difference between effect

and defect, attraction and detraction, "cheap" on first cost or inexpensive when judged by results. Choose a good printer!

A good black ink should be intensely black and possess the very necessary quality of permanence. This quality of "staying put" on the paper applies to a greater extent in the case of colour printing. Certain colours, although wonderfully brilliant when first laid down, have a nasty habit of running away under the continuous action of bright light or when brought into contact with chemical fumes. The name applied to them generally—"fugitives" -suits them. A fugitive may be an attractive but subsequently defaulting "friend" or even a murderer. pictures of the renowned artist Turner are but ghosts of their former selves—murdered by the use of temporarily attractive but fugitive pigments. The craftsman printer will choose his colours from those which are guaranteed "fast" by the maker, the list of which is continually growing.

A good ink should distribute easily over the forme without the tendency to fill in the small non-printing areas. The vehicle or varnish in which the pigment is ground should dry absolutely colourless. A smear on an absorbent paper will prove the worth of an ink under test. After standing for a few hours, if the ink smear be surrounded by a golden fringe of absorbed varnish, the specimen is not as saintly and blameless as its halo might suggest.

Good ink should know its permanent home, renouncing the printing surface in the fullest possible manner and founding itself as fully on the paper. It will, in the interest of good work, have a natural detestation of set-off, dry quickly and solidly on the paper and yet, out of consideration for those who have to "wash up" the machine after use, be equally slow to dry on the printing surface and inking rollers.

A printing ink is made to dry either by absorption and evaporation or by means of oxidization. The reason is therefore evident why special inks, which dry mainly by oxidization, are used for printing on non-absorbent surfaces—such as cellophane.

#### SPECIAL INKS

Intensive research has brought not only improvement in the general standard of inks but also useful innovations. There are duo-tone inks which give the effect of double tone in illustrations. Ink with duo-tone effect for the imitation of gravure by means of letterpress. Inks which will not contaminate, by odour, foods contained in wrappers on which they are printed. Litho inks of greater intensity of colour and stronger resistance to water. Water-colour inks for rubber block printing. Oil inks which give the same brilliant matt surface, printing solidly on dark cover paper.

Aniline inks are used a good deal. They consist mainly of coal tar dyes in methylated spirit. They print well on the majority of papers and are notable for their brilliance of colour. When first introduced, many of the colours were liable to destruction by the action of strong light but the list of bright and fast colours is steadily increasing.

Metallic inks of gold, silver and aluminium can be very effective when used in the right circumstances. Due to experiment and steady development, they are, from the point of view of satisfaction with their part in a finished job, quite safe to use. Highly lustrous, brilliant in effect, giving no qualms as to their likelihood of rubbing away, these modern metallic inks are a useful addition to the armoury of both printer and designer, but, as applies to the use of a second colour for decoration or emphasis—don't overdo it!

The development of bronze and other metallic inks has brought with it not only simpler method for excellent result, but has helped towards the removal of the danger to health of the worker, ever present with the "bronzing" method.

## PAPER: TYPES AND QUALITIES

The raw materials for the manufacture of paper are cotton or linen rags, esparto grass and wood pulp. The finest papers are made from the first of these, while inferior stocks such as newsprint are a product of the last. Certain other papers embody a mixture of esparto and chemical wood, esparto and rag, or rag and chemical wood.

In the process of making the pulp or "stuff," the raw material is macerated, boiled, bleached and finally brought to a state in which it has the appearance of milk.

Wood pulp consists of either chemical wood or mechanical wood, the first being prepared by chemical action of soda or bi-sulphite which, among other things, removes the resinous content, while in the second instance, the wood is chewed up by means of large grindstones over which water is continuously applied.

From any of the single fibres mentioned above it is possible to make paper, with the exception of mechanical wood. The fibres of this latter pulp are too short for paper-making when alone, and therefore must be reinforced by a fibre of greater length, such as is found in chemical wood.

The preparation of the milky "stuff" calls for more description than our space will allow, and therefore we will pass on for a glimpse of how the paper is made.

The pulp, as it enters the machine, is of a very watery consistency—round about a hundred parts of water to one of fibre. Passing over "sand tables" and through strainers, it is freed from matter likely to degrade the finished product, and then finds itself on a continuous web or wire screen, which, by its peculiar motion, spreads the fibre evenly and allows part of the water to drain away. More water is removed by suction.

Under pressure from the "dandy roll" the fibrous mass is further felted and closed and also given its water mark. Now paper, but still pulpy, greater solidity is imparted by its being run between the couch rolls—a further draining of water. After still more water is squeezed out by the press rolls, the paper is gradually dried by contact with steamheated cylinders.

An absolutely raw paper would be very absorbent—similar to blotting paper—and quite unfit for printing. In order to overcome undue absorption, the paper is sized. The paper may be engine-sized, in which case the pulp is sized with resin, or the fully developed paper may be animal tub-sized (A.T.S.) by being passed through a trough of gelatine. Tub-sizing gives the harder surface.

Paper varies in smoothness according to the treatment

which it has undergone. The variety known as antique has a rough surface and can be either wove or laid. Wove paper, when held up to the light, shows what its name implies—the woven appearance of a textile. Parallel lines running close together will be seen on the laid paper—if similarly examined—these "laid marks" being crossed at right angles by "chain marks" much further apart. These marks are impressed by the "dandy roll." Antique papers may be made from esparto and chemical wood, alone or in combination, or from a mixture of the two wood pulps.

A machine finished paper, known as M.F. printing, is a wove paper thinner than antique, having been passed between the calender rolls on the machine in order to impart a somewhat smoother surface. These M.F. papers vary in quality and surface, the average of the half-tone screen for printing upon them being about 85. They will not, of course, take the finer screens. Esparto, mechanical wood and rag enter into the making of M.F.s, the varying proportions having a bearing on the quality.

### LOADING AND COATING

To impart still smoother surfaces for use with half-tone work, the papermaker resorts to processes known as loading and coating. Loading consists of adding to the pulp china clay or some such mineral, with the object of closing the pores, while coating is the method of "enamelling" the surface of the paper with a mixture of gelatine, casein, glue or starch—which acts as an adhesive—and china clay, barium sulphate or other mineral substances which will form a level and white surface.

The smoothest of the non-coated papers is sized and super-calendered, known in brief as S. & S.C. This paper is given a small amount of loading and is then run through the rollers of the calendering machine, which consists of alternate polished iron rolls and "bowls" of compressed paper.

Îmitation art is a heavily loaded paper which is given its very smooth surface by being passed between hot calendering rollers. Half-tones up to 133 screen may be used with super calendered and imitation art papers. Art paper proper is a stock which has been given its very highly finished surface by coating with a mixture as previously described, calender rolling giving the finish. Variety of finish—high, matt or velvet—depends upon the calendering. Blocks of 183 screen and upwards will print well on paper such as this, and when a high gloss is not desirable, e.g. consideration of readability of large quantities of text matter, the matt surface will be preferred.

Two writing papers which are of interest to the advertiser, and which may be used for commercial jobbing, are known as banks and bonds—both on the thin and tough side, their main difference being that the bond paper is the thicker and heavier variety. Laid or wove, they are made in a variety of weights, colours and surface finish—such as linen and ripple. With due consideration of variation of surfaces, half-tone blocks of about 85 to 100 screen may be printed on these papers.

In their infinite variety, it is futile to attempt a description of cover papers. Plain paper, coated paper, stocks embossed in imitation of different kinds of leather, mottled colour effects, imitation hand-made, textile-like surface, faced with metal foils—the choice is more than wide enough to satisfy the majority of requirements.

There is no point in this book in delving further into the classes of paper available, but the papermaker can supply most of that which you are likely to require. Co-operate with your printer—do not be afraid, or too big to ask his advice—and never forget the claims of the blockmaker.

## SIMPLE TESTS FOR STRENGTH OF PAPER

The expert testing of paper involves not only the use of the microscope, but wide knowledge born of experience in the trade. There are, however, a few simple tests which are open to the ordinary user of paper. First, the right and wrong side of the paper, considering of course the uncoated class. In the usual way, the right side is that which is smoother. With machine-made paper, the wrong side shows the pattern of the wire web, while the right side carries the impression of the dandy roll. If the paper has a water mark, it will appear the correct way round when viewed from the right side.

The ability of a paper to "rough it" may be tested by

alternate screwing up into a ball and then straightening out. Holes and fissures will appear in a paper of low durability. Endeavouring to burst it by a sudden jerk outwards of the hands gripping its ends is another method of testing its strength. The surface may be rubbed as a test for fuzziness or lint, the absence of which is most desirable in a paper intended for half-tone work.

A paper for good printing, apart from the coated variety, should be medium soft sized with a well-calendered surface. One test for sizing is to damp the paper and note how it absorbs the water. The softer the sizing, the quicker the absorption. A hard paper, when moistened with the tongue, will take quite a while drying.

A good coated paper is one from which the surface does not readily "lift." In order to test the resistance to lifting in an art paper, press the damped finger on the surface with fair pressure, and after a second or so, withdraw it. The coating should not come away.

To distinguish an art paper from an imitation art, draw the edge of a silver coin over the surface. While the mark on imitation art will be quite faint, that on an art paper will appear as though drawn with an HB pencil.

There are many things which may be defects in paper, which the layman cannot see or detect and some which, given a sharp eye, he might—calender marks, granulation, brush marks, scratches, streaks—just to mention a few. Papermaking is a specialized job and we cannot know all about it. Our safeguard is to pay the fair price to our printer, that we may be served with the fair article—which, after all, is quite a fair proposition.

## SIZES AND SUBDIVISIONS

Now for an outline of sizes and subdivisions. Paper is sold by the maker in reams. Unless otherwise specified, a ream consists of 480 sheets but actually the number of sheets is variable.

A "perfect ream" contains 516 sheets and a "mill ream" of handmade paper 472 sheets. A ream of 504 sheets may be looked upon as usual for printing papers. When a weight is quoted—so many pounds—it represents the weight of a ream of sheets of a specified size.

A sheet, before being subdivided, is known as a broadside, and each subdivision goes by a name which describes its relationship as a fractional part of the whole. It will be realized that the simple statement of a subdivision conveys no meaning. The name of the broadside must be stated with it, in order to give an understandable idea of dimension.

Here are the names and sizes of the five broadsides most widely used—

The commonest folding commences with Broad Folio in which the sheet is folded to half its longer dimension. This gives two leaves or four pages. Let us try a folding with a Crown sheet 20 in. by 15 in. The first fold to Crown Folio would give us pages 15 in. by 10 in. Folding again to halve the longer side, we have four leaves or eight pages 10 in. by  $7\frac{1}{2}$  in., which is Crown Quarto.

Halving the longer side for each subsequent fold, we get in turn Crown Octavo,  $7\frac{1}{2}$  in. by 5 in., eight leaves or sixteen pages, Crown Sixteenmo (16mo), 5 in. by  $3\frac{3}{4}$  in. with sixteen leaves or thirty-two pages, and Crown 32mo with thirty-two leaves or sixty-four pages,  $3\frac{3}{4}$  in. by  $2\frac{1}{2}$  in.

Following this method of folding, we shall find that Foolscap 8vo is a page  $6\frac{3}{4}$  in by  $4\frac{1}{4}$  in., Royal 16mo  $6\frac{1}{4}$  in. by 5 in., Demy 4to  $11\frac{1}{4}$  in. by  $8\frac{3}{4}$  in., and so on. All these pages, in which the depth is the longer dimension, are known as "portrait" shape.

An oblong folding will give the same sizes, but the page will be of the "landscape" style—with the dimension of breadth greater than that of depth. For instance, to obtain Crown Oblong 4to, we first halve the breadth, which will give us Crown Long Folio, 20 in. by  $7\frac{1}{2}$  in. If we now halve the length, we shall still have Crown 4to as far as it concerns two dimensions, 10 in. and  $7\frac{1}{2}$  in., but they will be reversed as to their application to length and breadth. Try these folds for yourself, with a piece of paper cut somewhere near the right proportions.

If, instead of halving the full sheet, we first divide it into three along its longer side, the folding is known as Common Thirds. Divided across its width in a similar manner, it is in Long Thirds.

A sheet in long thirds, folded to half its length, becomes Long 6mo, while one in common thirds, further reduced to half its original width, is converted into Oblong 6mo. If, on the other hand, the breadth be first halved and then the length be folded into three, the result will be Square 6mo. As an example, Oblong 6mo Royal measures  $8\frac{1}{3}$  in. by 10 in.

For Square 12's the breadth is divided into three and the length into four, while for Long 12's the breadth into four and the length into three. Long 24's and 24's are folded in a similar way, but with divisions of four and six.

It will be instructive to note how these compare with a folding which incorporates a subdivision of the paper into three parts along its length—common thirds—thereafter halving the longer side. This will give us 6mo, 12mo, 24mo, and 48mo, at the same time helping us to realize why it is best always to quote not only the broadside and subdivision, but the size in inches of the booklet or other piece of print which we have designed. Working with a Crown sheet, 20 in. by 15 in., we shall find that 6mo (or oblong 6mo.) measures  $6\frac{2}{3}$  in. by  $7\frac{1}{2}$  in., while the size of Long 6mo is 5 in. by 10 in. Square 12's are 5 in. by 5 in., while 12mo measures  $6\frac{2}{3}$  in. by  $3\frac{3}{4}$  in.—and so on.

The following is a table of the sizes most commonly used. They will be found to cover the majority of requirements when designing booklets, folders and other advertising "literature."

	4to	Long 4to	8vo	16mo	6mo	12mo
Foolscap . Crown . Demy . Medium . Royal .	Inches   $8\frac{1}{2} \times 6\frac{3}{2}$   $10 \times 7\frac{1}{2}$   $11\frac{1}{2} \times 8\frac{3}{4}$   $11\frac{1}{2} \times 9$   $12\frac{1}{2} \times 10$	Inches $13\frac{1}{2} \times 4\frac{1}{4}$ $15 \times 5$ $17\frac{1}{2} \times 5\frac{5}{4}$ $18 \times 5\frac{3}{4}$ $20 \times 6\frac{1}{4}$	Inches 63 × 41 71 × 5 81 × 55 9 × 51 10 × 61	Inches 4½ × 3½ 5 × 3½ 5½ × 4½ 5½ × 4½ 6½ × 5	Inches $ \begin{array}{c} 8\frac{1}{2} \times 4\frac{1}{2} \\ 10 \times 5 \\ 11\frac{1}{4} \times 5\frac{5}{6} \\ 11\frac{1}{2} \times 6 \\ 12\frac{1}{2} \times 6\frac{2}{3} \end{array} $	Inches $5\frac{2}{3} \times 3\frac{2}{3}$ $6\frac{2}{3} \times 3\frac{2}{5}$ $7\frac{1}{2} \times 4\frac{2}{3}$ $7\frac{1}{3} \times 4\frac{1}{2}$ $8\frac{1}{3} \times 5$

The sizes given above are untrimmed folds and therefore, when designing a folder or booklet, the measurements should be something under these figures to allow for cutting and trimming. An eighth of an inch off each dimension is a

good average.

The designer should choose a broadside sheet from which can be cut, with the greatest measure of economy, two, four, six or eight copies of the piece to be printed. If it is to be printed on one side of the paper only, it might be machined "two up"—or more—in which case two or more settings of the matter would be locked up in one "chase," and one impression would produce the certain number of copies, which would afterwards be cut and trimmed.

# "WORK AND TURN" AND IMPOSITION

When the paper is to be printed on both sides, a method known as "work and turn" is used. Imagine a simple circular, printed on two sides. It could be printed from one forme on one side, and then again from another for

page two-result, one copy for two operations.

If, however, the two pages be "imposed" side by side, page one to the left and page two to the right, and a sheet of paper double the size be used, two complete copies can be produced without any greater expenditure of time for printing. Our first impression will give us page one to the right of the sheet and page two to the left. Having "turned" the paper, if we lay on again the second impression will give page one backing page two and page two backing page one. Cutting apart, we have two copies. This is the simplest case of the imposing of pages and work and turn, but our booklet of eight, sixteen, thirty-two or more pages can be printed in similar manner.

# CALCULATING WEIGHTS AND SIZES

Sheets of paper are made which are twice or four times the size of the broadsides that have been previously quoted. We specify them by putting the word "double" or "quad" (quadruple) before the name of the particular broadside. The size of the double sheet is arrived at by multiplying the shorter side by two, e.g., a Crown sheet being 20 in. by 15 in., Double Crown measures 30 in. by

20 in. By doubling both dimensions we arrive at the size of the quad. sheet—Quad. Royal is 50 in. by 40 in. It will be realized that when subdividing these larger sheets, the page will be correspondingly larger for any particular division, for instance, while Crown 4to is 10 in. by  $7\frac{1}{2}$  in., the same size will be 8vo in Double Crown and only 16mo when a Quad Crown sheet is so subdivided.

When describing a certain paper, the maker will give the number of sheets to the ream, together with the weight per ream of the particular size quoted. The price will be quoted per pound. A specification would go something like this—So-and-so Cartridge Offset . . . Double Crown . . . 60 lb. . . . 504's. The price per ream is easily calculated by multiplying the price per pound by the number of pounds in the ream.

Given the ream weight for a certain size of sheet, the weight for some other size can be arrived at by multiplying the given weight by the new size, and then dividing by the size for which the weight is given. As an instance, take our Double Crown, 60 lb. What will be the weight of a ream of similar paper in Medium 23 in. by 18 in.?

Multiplying 60 lb. by the product of the dimensional figures of Medium—414—gives us 24,840. Dividing this figure by 600, which is the product of the two dimensional figures of Double Crown, we have as a result the weight of a ream of the particular paper in Medium size, which will be found to be a fraction over 41 pounds.

Finally, use the best paper that the job will allow. Remember that the time spent on preparing a layout, setting type, making ready, machining and all the rest of it are just as costly for a bad paper as for a good one, and after all, so much depends upon it. What is the use of saving a few coppers, if the result, instead of being a recommendation, is a self-made label—an emissary whose main message is a loud and raucous "Fifth rate!"

### CHAPTER X

### **TYPOGRAPHY**

A SHORT history—How to learn type faces—Roman types—Variations of fount—Mechanics of the printer's craft—Points and ems—Leading—Casting off—En-quad method—Leaded types—Copy-fitting calculations—A simple method—Lower-case "c" method—Index-figure method—An example—Blocks and captions—Bedrock of good typography—Length of line and size of type—Rule—The border—Decorated borders must strengthen theme—Linotype—Monotype—Aim at error-proof copy

As in all other arts, the person who wishes to acquire a real and *intelligent* working knowledge of typographical layout must be willing to commence at the beginning.

An artist or designer commences by learning the possibilities and limitations of his materials, and the trained musician his notes, pitch, time, form, keys, harmonies, and all the rest which goes to the making of *real* music. By way of a groundwork and as a means of appreciating form and technique, the artist or musician studies not only one or two of the old masters but a history of his particular art.

The good basic roman types were designed by real "old masters." They have not only stood the test of centuries, but the majority of fine present-day faces are based upon them. Let us therefore briefly outline how the types used in modern printing came into being.

## A SHORT HISTORY

For our purpose we need not go back farther than the year 1425, when Niccolo Niccoli, a teacher of scribes, evolved a beautiful book hand known as humanistic or neocaroline. This hand-written letter was the basis on which the roman type faces were designed. Far more ancient in origin than the contemporary "black" or gothic letter, it was also named littera antiqua—old or antique letter.

Early manuscript copies of ancient Roman texts were written in the caroline hand from which the neo-caroline was developed, and so the type developed from the book hand became known as "roman." There is another

explanation of the word. Printing was introduced into Italy by Conrad Sweynheim and Arnold Pannartz. In 1470, the press at the Sorbonne copied a fount used by them in Rome round about 1464. This was the first "roman" type used in France, taking that name from its place of origin.

A pure roman type was cut at Venice in 1469 by the brothers Johann and Wendelin da Spira. This effort, although good, was overshadowed by a great design which was produced one year later by a Frenchman named Nicholas Jenson—a design which was destined to stand unassailable for a quarter of a century. Jenson is one of the great names in typographical history, and his type—one of the basic romans from which hosts of others have been developed—is considered by many experts to be the finest ever cut, when judged on readability and "colour."

Next for notice is Aldus Manutius of Venice. In 1495 he produced a tract by Pietro Bembo, entitled *De Aetna*. The type used for its printing is considered to be the father of all "old face" types.

Four years later came the famous Aldine book, the Polifilo, the type being an improvement on that of the De Aetna. The very fine modern version of this 1499 type is Poliphilus, cut in 1924 by the Monotype Company. It is on the models of these two great old masters, Jenson and Aldus, that many of the best book faces have been designed. Aldus was the first printer to make use of a sloping letter known at the time as chancery and which is now called italic. The style of italic in modern use, however, is based on the design of Ludovico Arrighi, a scribe at the Vatican.

Claude Garamond is another outstanding name, his roman types showing a strong Aldus influence. He is believed to be the first to treat roman and italic as members of one fount, his italic being based on that of Arrighi. "Garamond" is a face widely used to-day, but it has been shown by Mrs. Beatrice Warde that our contemporary Garamond, with curved-up, pointed serifs on the top of such letters as m, n, p and r, is a copy of a design based on Garamond and issued by Jean Jannon in the year 1621.

The type of Garamond, based on the Polifilo face of Aldus, had a great influence on the printing of his day.

Perhaps attributable to the activity of his pupil Guillaume le Bé, working in Venice (1546-50), Garamond's design gradually displaced the faces introduced by Jenson and the brothers da Spira. Garamond can be looked upon as the source from which a number of our "classic" faces have come down to us.

We next find the Dutch foundries taking a hand. What we might call interpretations of the Garamond design were evolved in about the middle of the seventeenth century. Some really beautiful efforts were the work of Christopher van Dyck, as also those of the brothers Bartholomew and Dirck Voskens.

Based on the designs of the Dutch foundries came the first really English letter—the renowned Caslon Old Face, cut by William Caslon between the years 1720 and 1726.

For those who would acquire a type sense, Caslon is the reference face with which to begin. Its characteristics should be known "inside out" by the aspirant to a knowledge of type faces and their possibilities. If we do not know how a certain person differs in character from another, we do not really know that person and his capabilities, or whether to trust him. It is in similar case with type faces.

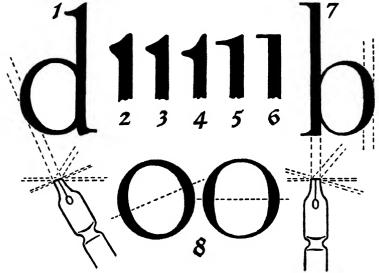
# HOW TO LEARN TYPE FACES

To copy the fount, even if only one letter at a time, is the only real way to acquire a thorough knowledge of the face, and more easily to come to recognize other faces by comparison with it. Copying of the different founts not only fixes the character of the type in the mind, but furthers the appreciation of the letter and ability to draw it with something near its correct proportions on a layout. Lack of this knowledge and facility is a fruitful source of remarks about "rubber type" from the unfortunate printer who has the job of translating many so-called layouts.

This copying of faces—say from a 60-point original—is part of the method of Mr. J. H. Mason, D.I., one of our greatest typographers and a fine teacher. It is a counsel of perfection, which, in these days of short cuts, is often jibbed at by many aspiring typographers. Unless already an expert, the reader will be wise to follow such excellent advice.

### ROMAN TYPES

Roman types are of two descriptions—old face and modern. The word "modern" refers to the characteristics of the face, and has nothing to do with the date of its design. A face produced yesterday can be an old face,



Old face and modern. At (1) is an old face letter, diagonally shaded and with sloping serif. (7) Note the difference in this "modern" style with its vertical shading, sharp contrast between mainstroke and hairlines, also the thin, horizontal serifs. In between these two letters we see five different examples of serif treatment, varying both in shape and solidity. Such may be seen in (2) Poliphilus, (3) Caslon Old Face, (4) Garamond, (5) Baskerville, (6) Bodoni. The serif at (7) varies from that shown at (6) in that it is "bracketed," i.e. it curves into the mainstroke. (8) The slant-cut pen held at an angle, and the straight-faced pen held with the holder pointing over the shoulder. The dotted lines show approximate width of lines produced when the pens are drawn in various directions. Imagine each nib following round its diagonally or vertically shaded "O."

while one designed two hundred years ago will be classed as a modern.

Old face types are the more monotone in colour, the modern showing greater contrast between thick and thin strokes. While in an old face type the shading is oblique, in the modern face it is vertical. Let us take, for instance,

an upper case (i.e. capital) O of either face. In the modern, the thickest portions will fall on a horizontal line at about half the height of the letter, whereas in old face they will be diagonally opposite. We can imagine the modern being drawn with an ordinary broad pen, its holder pointing directly over the shoulder, and the old face getting its oblique shading through the use of a pen with its writing face cut at an angle to its longer axis, and held with its holder sloping away to the right.

At the top and bottom of letters there are formations known as serifs. These top serifs, in old face, are sloped and are possessed of considerable solidity, whereas in modern they are horizontal and thin. Comparison of old face types as Poliphilus, Cloister or Garamond with a modern such as Bodoni will be the best illustration of the foregoing.

Types may be seen with some of the old face characteristics but with a tendency towards modern. In drawing they will be more squared up and mechanical than the honest-to-goodness old face, their shading tending towards vertical, and the serifs, although sloping, will be nearer the horizontal. Baskerville is one of these—designed by John Baskerville, a writing master, 1755–6. The Monotype version is similar to Caslon Old Face in general design, but there is greater contrast between thicks and thins, the serifs are more prominent and the shading is nearer the mechanically vertical.

Another splendid type in this category, eminently readable and produced in our own time, is Imprint, designed in 1913 by Gerard Meynell and J. H. Mason. If the reader would like a test of skill in the discovery of how type faces can differ in characteristics, although similar at first sight, comparison should be made between Caslon Old Face, Baskerville, and Imprint. Although heavier, the Plantin of Messrs. Stevens, Shanks might be included.

Our aim should be to get to know a few designs thoroughly, so as to be able to appreciate the many—and to use the one most suitable for the job in hand.

# VARIATIONS OF FOUNT

The majority of founts have certain characteristic letters by which they may be distinguished. The attempt

to discover these little variations is quite good training. We have not the space to go very far into this, but here are a few of the things which should be looked for. In Caslon Old Face the upper-case A has a small segment cut diagonally from the thick stroke at its apex. The tail of Baskerville g does not rejoin the thicker portion. Compare the "ears" of Caslon upper-case T with those of Garamond—note that the same letter of Mono. Baskerville lacks them. Imprint, it will be noticed that the diagonals of upper-case K are joined to the main stem by a thin horizontal stroke. See also the shape of the "ear" of the lower-case g in the various founts and its position on the letter. Last, but not least, note the serif formation. These are just a few of hundreds of variations. Look for yourself and—we hope—become interested. It is from a knowledge of notes that symphonies are born; from appreciation of tone, pictorial masterpieces!

It will be noticed that the various faces differ in colour or weight. For instance, Caslon, Garamond and Baskerville are light faces, while Poliphilus and Monotype Plantin are more solid and colourful.

Many types are offered in what are known as families, not only varying in size but being produced in weights of light, medium, bold and heavy. Some are also much wider in "set" than normal, when they are known as "expanded" or "extended." A condensed letter is one which is narrower than the normal. Condensed letters are sometimes used in spaces which are long and narrow, while the expanded style is employed for areas in which the width is predominant. It is best, however, to avoid these if at all possible, using instead a normal letter of narrow or wide set as the case might call for.

Normal letters are undistorted letters, and their width of set is determined by the length of an alphabet of the fount set in line. Eric Gill's Perpetua is narrow set, and so is Poliphilus. Caslon and Garamond are medium set, while examples of wide-set faces are Imprint, Monotype Plantin, and Baskerville.

# MECHANICS OF THE PRINTER'S CRAFT

We pass on to the mechanical side of the printer's craft—the means to the end. This end is the production of printed

matter which is not only readable but pleasing and attractive. Such work is seldom brought to light by those whose only thought of type is in terms of lumps of metal. A fount of type is composed of "characters" possessed of "faces" which can be beautiful and also expressive.

The appreciation and knowledge of type designs can only come through one channel—the study of type faces. Only one person can fully impart this instruction—our willing, interested and sensible self.

The typographical layout is the equivalent of the architect's plan or the working drawing of the engineer. The act of making it has been very aptly described as "setting type on paper." Therefore it calls for a good knowledge of the materials with which the printer works.

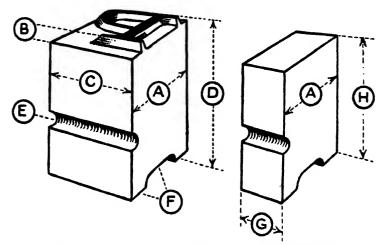
There are letters or "stamps" which, set side by side, compose into words, spaces for separating the words one from another, larger spaces known as quadrats or quads for filling out lines to the required width, and pieces of metal known as leads for increasing the separation between lines of type. Spaces and leads are, of course, cast to a height which is well below the "type high" of the printing face of the "stamps." Nevertheless, judged on its plan view when set up, all printing material is produced to standard measurement, based upon a method known as the point system, a point measuring roughly one seventy-second of an inch.

# POINTS AND EMS

The width of a type area is calculated in "pica ems," which are units of 12 points. Before commencing composition, the printer sets his composing stick to the number of ems required by the "measure"—or width—indicated on the layout. For instance, there are 72 points to the inch, the pica em is 12 points or 6 ems to the inch; therefore a width of 4 in. would represent a measure of 24 ems.

The point size of a printing type is measured vertically and is the size of the body, not that of the printing face. The face is naturally smaller than the body size, as the latter includes room for upper-case or capital letters, which, in the usual way, take up about two-thirds of the space, rising up above the general level of the lower-case or small

letters. The bottom of the capital letters stands on the "body line," in alignment with the bottom of the majority of the lower-case letters. The remainder of the space below the body line or general "writing" alignment is taken up for the accommodation of "descenders"—the tails of



The main points of a type "stamp." The actual face of the character is shown in solid black, as though inked by the roller of the machine. (A) The body dimension, which is the point size of the type. (B) The beard of the type—descender space—which includes the bevel and the shoulder. (C) The set width. (D) The "height to paper," which is 0.918 in., or roughly the diameter of a shilling. (E) The nick, by the shape of which a fount may often be distinguished. When setting, the nick is always placed to face outwards. (F) The groove, forming the feet. The point size of a space is, of course, the same as that of its relative "stamp," as at (A). Its width (G), however, will vary according to its classification. The em quad is equal in width to its depth, while an en is half the width of an em. Thick, middle and thin spaces measure respectively three, four and five to the em. The height (H) may vary. The height for the usual "low" spaces is about 41 ems. Spaces for matter which is to be stereotyped reach to the shoulder of the printing stamp, being about 5 ems high.

letters such as g, j, y and p. The small letters which rise above the general level of the lower case, e.g. b, d, f, and l, are known as "ascenders."

The usual sizes for body matter are 6-, 8-, 10-, 12-, and 14-point. For display work 14-, 18-, 24-, 30-, 36-, 42-, 48-, 54-, 60-, and 72-point. Certain types are also cast

in "odd" sizes, such as 7-, 9-, and 11-point. For instance, Poliphilus is cast in 13- and 16- and Nicholas Cochin in 20-point, but the first list of sizes are those most frequently used.

An "em" of a fount of any particular point size is the square of the body of that type. It is roughly the space occupied by the upper-case M of the fount. An em of 12-point would measure that size either way—a pica em—while a 36-point em would present a square 36 points wide by 36 deep. Take care not to confuse the "pica em" with the em, which is the square of the body of any type irrespective of size.

Spaces are of different sizes. The em space, known to printers as a "mutton quad," has already been described. An en or "nut" quad is equal to half an em—in 12-point it would be 6 points broad. Other spaces are known as thicks, mids and thins, being in breadth three, four and five to the em respectively.

When a compositor, setting by hand, has a line of words in his "stick," having roughly spaced them in the process of setting, he sets about his final spacing for measure and effect. This is known as "justifying" the line. The use of middle spaces in a setting gives the best colour and easy reading, whereas by the use of thicks, there is a liability towards "rivers," which happen when words do not sufficiently overlap the spaces above them and spaces coincide, making streaks of white which run through the setting from top to bottom. For good work specify mid spacing, is the advice of many of the expert typographers.

Quads are used to run out short type lines to measure and also to fill out and build up space which is non-printing. Besides the em and en quads, they are produced in multiplications of the em width, e.g. 2-em, 3-em and 4-em.

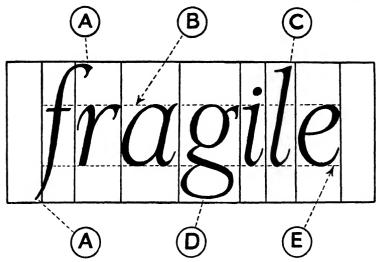
# **LEADING**

When one line of type is placed directly contiguous to the one above it, we say that the matter is "set solid." When further space is added between the lines—when the distance is increased between the descenders of one line and the ascenders of the next—the setting is said to be "leaded."

Types with short descenders such as Kennerley Old

Style, Imprint, Baskerville and Plantin O.S. need leading in order to increase their effect and readability, whereas those with long descenders are naturally spaced. Examples of the latter are Garamond, Caslon O.F., Cloister and Poliphilus.

Leads are made thin, medium and thick, measuring in



Accommodation of letters on body. (A) Kerns or overhanging portions. In the metal stamp, these extend outside the actual body of the letter and are supported when printing by the shoulder of the preceding or following letter. (B) The "x line," giving the general height of the lower-case body, above which rise (C) the ascending strokes. Ascending letters are, normally, slightly taller than their accompanying upper-case letters. Capitals which reach the ascender line are liable to appear too large. (D) Letters with loops or tails extending below (E), the body line or "general writing alignment," are known as descenders. See that due attention is given to these proportions when drafting layouts. Cramping "for convenience" in width or depth, and then blindly specifying a type, is the surest method of asking for trouble.

depth  $1\frac{1}{2}$ , 2, and 3 points respectively. Faces which carry very short descenders should be leaded so that their effective body is one size larger, 2-point leads being inserted between lines of 6-, 8-, 10-, or 12-point. This, however, is given as general advice, depending upon the colour of the face. In certain instances, a thin lead might be

found sufficient, as also a compromise might be struck when dealing with the larger sizes.

It should be understood by now how a panel of type is made up of a number of rectangles of different shapes and sizes and set to a certain measure in pica ems, the short lines being squared up by the addition of quads, and in certain instances the lines being further separated by leads. The wooden equivalents of leads are called reglets, which in 6-point and 12-point thickness have the respective appellations of nonpareil and pica. For average sizes, leads and reglets are cut to suit the width of measure in pica ems.

In order thoroughly to appreciate the point system, it is good practice for the non-technical to take a simple printed setting, then by means of a type scale—which can be obtained quite cheaply—mark off the depth of type bodies, together with the sizes of quads and spacing materials which might possibly have been used, at the same time noting the measure and the size of space employed.

### CASTING OFF

We could still further fix the working of the point system in the mind by a brief consideration of the method of arriving at the cost of composition. It is based on the number of ens embodied in the type area of a page multiplied by the number of pages, and is subject to various extras or deductions, e.g. when leads of 2 points or upwards are used.

For our purpose, a plain straightforward calculation for one page will be sufficient to illustrate. How many ens of 10-point are there in a page area 20 ems wide by 40 ems deep?

The pica em measures 12 points either way, and therefore if we multiply the square of the pica body by the dimensions of our type area, which is in picas, we find the number of square points. If we divide this superficial area of square points by the area of an en of 10-point type—10 points by 5 points—we shall arrive at the number of ens of 10-point in the given area. Here is the sum—

$$\frac{12 \times 12 \times 20 \times 40}{10 \times 5} = 2264 \text{ ens of 10-point}$$

This figure divided by 1000 and multiplied by the price per thousand, with consideration of extras and deductions, will give the cost of composition.

# **EN-QUAD METHOD**

While on the subject of ens, we might deal with the en-quad method of casting-off copy. This method is based on the provision that the alphabet of the average book fount has a length of 13 ems of its own body—26 letters averaging one en. A further acceptance is that the average English word with its following space is equal to 6 ens.

Let us imagine that we have counted the number of words in a manuscript for a booklet, and the figure is 3000. If we set this with 10-point type in an area 20 ems wide by 40 ems deep, how many pages will the booklet comprise?

Multiplying the number of words in the copy by the number of ens to the word—3000 by 6—we obtain the number of ens in the matter to be set, which is 18,000. We must next find the number of ens per line and the number of lines per page, which two items, multiplied together, will give us the number of ens in a page.

To find the number of ens per line, if we first multiply the measure by 12 we bring it to points. Dividing this by 10, we have the number of 10-point ems to the line. This figure multiplied by 2 is the number of ens, thus—

$$20 \times 12 \times 2/10 = 48$$
 ens per line

If we multiply the depth by 12 and divide by 10, we have as a result the number of lines of 10-point per page.

$$40 \times 12/10 = 48$$
 lines per page

Dividing the product of these two into the total number of ens to be set, we thereby find the number of pages which the booklet will make—

$$\frac{18,000}{48 \times 48} = 7\frac{13}{16}$$
, or 8 pages

Supposing the process reversed and we wish to find the type size needed for our 8-page booklet, retaining the same type area. Dividing our 3000 words by 8, we find that accommodation must be found for 875 words to the page.

In our page area 20 ems by 40 ems only 266 words of 12-point will go— $20 \times 40 \times 2 \div 6$ . Let us try 10-point. Our measure will take 48 ens or 8 words, and 48 lines will go into the depth of 40 ems. The result is 384 words per page—just comfortable with a little to spare.

### LEADED TYPES

When a type is leaded, the thickness of the lead is added only to the depth dimension of the type body. A 10-point type, 2-point leaded, would be calculated as 12-point body for depth, but on its actual size for width. In other words, our calculation for the number of words contained in a certain measure when using a specified body size is constant, but the number of lines embraced in a given depth will vary according to the thickness of lead added to the body depth.

An illustration will make this clear. We will suppose that we want our type page leaded. By trial and error we find, for instance, that 10-point 1-point leaded, and 9-point with 3-point leads will both over-run our specified eight pages. We will therefore try 9-point with 2-point leads. Our measure is still 20 ems and depth 40 ems. Calculation will show that 53 ens of 9-point will go into the measure. The depth of 40 ems is 480 points. Dividing this by type body plus lead, which is 11, we find that there are 44 lines to the page. The product of 53 and 44 divided by 6 gives us 388 words to the page, which will spread our 3000 words over  $7\frac{3}{4}$  pages.

# COPY-FITTING CALCULATION

Perhaps we should like to reset our eight-page booklet as a six-page folder. At present it is set in 9-point with 2-point leads. What size of type must we use to bring the same copy into the new space? Here is a little proportion sum based on the square of the nominal em. If we multiply the "square" of our em, 9 points by 11 points in this case (including 2-point leads) by the new number of pages and divide by the present number, we shall produce a figure which represents the *square* of the size of type required—

$$9\times11\times6/8=74$$

The square of 9 is 81, and that of 8 is 64—one too large and the other too small. Eight-point with 1-point lead gives us 8 by 9, the product of which is 72 and suggests itself as the combination to use. Nevertheless, try conclusions with a  $1\frac{1}{2}$ -point lead. It might be nearer for making a complete last page—but, of course, allowance must always be made for headings, sub-heads, or spacing known as white lines.

For the last of our calculations introducing the en quad, let us suppose that we wish to transform this same 8-page booklet, set solid in 10-point, to 20 ems measure and 40 ems deep, by resetting it in 14-point with 4-point leads, to a measure of 28 ems and to a depth of 42 ems. How many pages will the new setting occupy?

Working to the round figure of 8 pages, we multiply this by the number of ens to the line of the original type and again by the number of lines of that body to the page. This gives the number of ens in the composition. Dividing this by the number of ens of the new body size in the new area, we arrive at the number of pages—

$$\frac{8 \times 48 \times 48}{48 \times 28} = 137 \text{ pages}$$

For a greater degree of accuracy, we can work out the problem by lines. A count gives us a total of 375 lines of 10-point. There are 48 ens of 10-point in the 20-em measure; therefore if we multiply the number of lines by this figure, we arrive at the number of ens in the booklet. Dividing this figure by the number of 14-point ens in the 28-em measure, which is 48, we obtain the number of lines of the new setting. In this case it gives the same figure, owing to the number of ens being the same for both types, each in its own measure—

$$375 \times 48/48 = 375$$
 lines of 14-point

If we divide this figure by the number of lines per page of the type in which the matter is to be reset, we arrive at the number of pages—

$$375/28 = 13\frac{14}{28}$$
 pages

This last example, with its differing types and measures, one type solid and the other leaded, might seem involved,

but with a little study it will be seen to be quite simple. These problems are only variations of our old school friend —or enemy—the sum involving the very precise covering of a floor of exact dimensions with meticulously fitting linoleum. Perhaps a better analogy would be the perfect fitting of rectangular tiles on a floor of a specified size.

### A SIMPLE METHOD

It will be realized that the accuracy of these copy-fitting calculations depends to a very great extent on the care taken in casting-off the manuscript. Handwritten copy presents greater difficulty than typewritten, as it is not mechanically exact as is the latter. Nevertheless, if it is evenly written, we can arrive at our result passably easily by taking the average number of words per line, multiplying by the average number of lines per folio, and then by the number of folios. Should some of the folios be unevenly written or of different size, ignore them for the time being without forgetting them—and work on the batch which is straightforward. Concentrate on fifty lines of this good batch, and take the average for words per line. Multiplying by the average number of lines per folio, and then by the number of folios, gives the number of words in the good batch.

If the remainder is a very bad example, it might be necessary to count every single word, but a little individual trouble now is better than more serious and involved worry later—not only for oneself but for others also.

When making estimates in this manner, parts of lines finishing paragraphs should be counted as full lines, and partially filled folios at the end of chapters as full ones. The number of words, multiplied by 6, will give the number of characters in the copy, and the composition can then be cast up by the en-quad method or by one of the other modes which will be described later.

Typescript is an easier proposition, owing to the number of characters to the given measure being a constant factor, each occupying equal space in the line. With the ordinary commercial typewriter, the "set" of the characters is either ten or twelve to the inch. For this reason it is a comparatively easy matter to arrive at the exact number of

characters in the manuscript, with consequently greater accuracy when it comes to the setting up in type.

In order to calculate the space the copy will occupy, with the least amount of error, it is best to count the number of characters to each paragraph, dotting the figure lightly in the margin. Working in this way, we arrive at the number of lines each paragraph will occupy, whereas if our calculation is based on the number of characters in a folio or in the whole manuscript, we simply obtain the number of lines "run on" without a break.

The copy matter will be typed to a certain measure. Make a gauge by ruling two vertical and parallel lines on a piece of transparent paper at a distance apart which is actually or apparently the measure. Let us imagine that it is 6 in. and that the typewriter used has a set of ten characters to the inch. Each full measure will contain sixty characters. Placing the gauge over the folio with the left-hand vertical line corresponding to the commencement of the type lines, read off the number of full measures. Multiplying this figure by 60 will give the number of characters in the full or nearly full measures. Some lines will overrun the measure. Count the characters lying outside the right-hand line and add to the total for full measures. The short line completing the paragraph might be only a word or two-or three-quarters of a line. The quickest way to count the characters in these short lines, to be added to the other total, is by means of an ordinary foot-rule. In this instance, place the scale marked in tenths of inches against the line and read off the number of characters. For instance, one inch equals 10, and three and seven-tenths inches, 37. The only thing to look out for is to make sure of the set of the machine and, to be on the safe side, to note the number of characters to the full measure on the gauge as reference and a reminder.

We have dealt with the method of casting off which presupposes the en quad to be the width of the average character. It has been given an extra amount of prominence here, owing to its being a good follow-on to matter dealing with the point system and involving calculations connected with it. Although the two following methods are considered more accurate, a study of the older en-quad

# PRINT WITHOUT PLAN CH WITHOUT THOUGHT

To assist the uninitiated to grasp the point system. In the actual typesetting, the skilled compositor might, in certain instances, use more wooden reglets in order to avoid a surplus of metal against metal. However, in view of the reason for the "reconstruction," he will overlook our technical shortcomings if the sum total of our values "makes" measure and depth correctly. The "printing surfaces" in this example consist of the message in type, together with a motif composed of full-faced rules. The remaining straight lines, hand-drawn over the print, show the points of contact between type stamps, their point size, and also the plan area of spaces, quads and leading. A type forme should be thoroughly in square. Its width at any point at right angles to its depth should correspond to the given measure, while its depth must be constant at any point at right angles to its width. Let us see how we "set" this piece on paper. We decided upon the measure first. In the original it is 18 ems and is governed by the extent of the word LAYOUT, which just makes the width in 48-point type. Measure is always set in pica ems, therefore the width in points is 216. Two vertical lines extending the whole length and embracing the maximum width represent the measure. The depths of type bodies are now indicated. If correctly marked, the weight of leading will be revealed. The two lines of 18-point type are separated from the main word above and from the summit of the motif below by a nonpareil reglet, the separation between the lines being 6 points also. The lower group of lettering is in 10-point type 2-point leaded, with a 3-point lead above and below. En quads -half the body size in points—are used for spacing between words. Quads and spaces are now added in order to centre lines or else to run them out to measure.

Two examples will suffice. In the case of the first 18-point line there is a space of just over 25 points either side, the line being dead centred. Simple calculation will suggest the most likely values to be placed either side—a mutton quad, and two thin spaces each onefifth of 18 points. For the second example there is a space of  $87\frac{1}{2}$ points to fill after the 10-point line PRINT WITHOUT PLAN. This immediately suggests quads to the value of 8 ems, plus an en 5 points and a middle space 2½ points—87½ points in all. When carrying out this practice, remember that we cannot hope to approach in our drawing the wonderful accuracy of type. Work at the job for what it is—an attempt at analysis and a juggle with the point system. We may now suppose that we have completed two rectangles of type to a measure of 18 ems. Now for the motif, made up of three pica widths either side of a 6-point centre. Rules in the lower section are 12 ems long. The 12-point faces in the upper section are "stepped"—9, 12 and 15 ems long. Three 12-point en quads break the nonpareil rule into sections of 4 ems, with the exception of the lowest which is 3 ems. The top rule therefore projects upwards for 3 ems, thus preserving a uniform value of "step." Stepping is now squared up by means of quads 1 pica wide by 3 deep, or others of equal sum value. With our four completed "rectangles" in position, we are left with two empty and non-printing areas to fill up. Carry on!

method will not have been waste of time if the reader has thereby gained facility in the manipulation of point calculations.

### LOWER-CASE "c" METHOD

The first of these other modes is known as the *lower-case* "c" method, in which the "c" is taken to be the width of the average letter of the alphabet. In order to work by this mode, one has to know the number of lower-case c's of the fount to be used which will compose into the space of a linear inch. Obtain this information from your printer and record the figure, with particulars of face and size, for future reference.

If we divide the number of c's to the inch into the total number of characters in the manuscript, we have the number of inches which the copy will make in one continuous strip—as though reeled off by a tape machine. Multiply this number of inches by 6, and we find the number of picas in this long ribbon of typematter. Cutting the ribbon up in lengths equal to the suggested width of the type area, we realize the number of lines. Dividing by the number of lines to the page will give the number of pages.

Take as our illustration our booklet of 3000 words, set to measures 20 cms wide by 40 cms deep. The manuscript contains 18,000 characters. The 10-point we are to use gives 15 lower-case c's to the inch. Dividing 15 into 18,000 shows that there are 1200 linear inches of type matter. In picas, this represents 1200 multiplied by 6, which is 7200. This figure divided by the measure (20 cms) gives 360 lines. This number of lines divided by 48—the number of 10-point lines in 40 cms depth—furnishes an answer of  $7\frac{1}{2}$  as the number of pages. It will be admitted that it is an easy matter, given the appropriate "c" figure, to calculate the number of pages when set in a larger or smaller type.

# INDEX-FIGURE METHOD

The second system is the *index-figure method*, by which the mean width of character is arrived at by taking an average over twenty or thirty lines of matter composed in the type to be used. Should we be able to obtain a page of matter in the type specified and set to the proposed measure, it is just plain sailing. First, the number of letters and spaces in twenty or thirty lines should be counted. The result, divided by the number of lines counted, gives the average of characters per line—the line-index figure. This index figure, divided into the number of characters in the copy, will tell us the number of lines which the manuscript will make. The number of pages can then be found by dividing this latter figure by the number of lines in the page to be set.

Failing to find such a page, however, brings no need to trouble your printer to set up the score or more of lines. Should it so happen, instead of working to average number of characters per line, we calculate on the average width of the single character. In order to do this, it is sufficient if we can come by a page of our specified type, set to any measure. Count the number of characters in twenty or thirty lines as in the previous example. Next, multiply the measure in ems of the specimen by the number of lines counted. We now have the measurement in picas which is occupied by a certain number of characters. If we divide this end to end measure—this "strip of picas"—by the number of characters, the result will be the space taken up by the average single character and which we call the character index figure. Multiplying this index figure by the number of characters in the manuscript, we find the strip length in picas which the copy will occupy. Dividing this figure by the proposed measure we obtain the number of lines, and further division by lines required to the page, the number of pages.

# AN EXAMPLE

Although the first system is quite plain and straightforward, the second perhaps calls for illustration by means of an example. Let us resurrect our 3000-word manuscript. We wish to make it into a booklet, set in 9-point Imprint 1-point leaded and set to our favourite measure, 20 ems wide by 40 ems deep. How many pages will it make?

We cannot find a page of our chosen type in this measure, but manage to come by an example set solid to a measure of 18 ems.

A count of characters over twenty lines gives the figure

1040. This number of characters is contained in a length of 360 ems—measure of 18 ems multiplied by the number of lines. The character index figure is length in ems divided by the number of characters, thus—

$$360/1040 = \frac{9}{26}$$
 (ems) character index figure

The index figure multiplied by the number of characters in the copy (18,000) gives the strip length in picas, which, divided by the measure of 20 ems, provides the number of lines.

The type size to be used, with its 1-point lead, is equal to 10-point body for depth and therefore 48 lines will go into the depth of 40 cms. Consequently, if we further divide by 48 we shall then know the number of pages. Here is the complete sum—

(Index 
$$\frac{18 \times 20}{1040} = \frac{9}{26} \times \frac{18,000}{20 \times 48}$$
 (Characters in copy). figure) Here  $\frac{18 \times 20}{1040} = \frac{9}{26} \times \frac{18,000}{20 \times 48}$  (Proposed measure and lines to page)

This cancels down to  $\frac{675}{104}$ , and gives an answer of  $6_{104}^{51}$  pages.

Other calculations will be found easy by this method if we bear in mind that we are dealing with characters per line, lines per page, and total number of pages, ringing the changes according to the information required. For instance, suppose we require to know the number of words required to fill a given number of pages, set to a certain measure in a specified type. Should the line index figure be to hand, if we multiply it by the number of lines to the page—solid or leaded—and then by the number of pages, we have the number of characters. Dividing this by 6 gives as a result the number of words. If we are obliged to use the character index figure, division into the measure supplies the number of characters per line, after which the rest is straightforward.

# **BLOCKS AND CAPTIONS**

Blocks for the illustration of booklets take up a definite amount of space, which must be brought into the casting-off calculation. The general rule is to add all block areas in ems of width and depth and then divide by the page area in ems. Apart from this general rule, however, there are a few other considerations. When blocks run to the full width of the page, it is only necessary to take their depth in ems, plus white top and bottom, together with space occupied by captions. These depth measurements for each of the full-width blocks, added together and then divided by the depth of the page area, will give the additional number of pages required.

While on the subject of captions, it should be noted that the size of type used in the setting of these, and panels apart from the main copy, should as a general rule be two sizes removed from the main setting, e.g. a 6-point type would be used for captions or panels when 10-point is used for the main text.

When a block, narrower than full measure, is inserted at the side of the page with one edge to a margin, the calculation must include the size of block plus white on three sides, in addition to space for the caption, if any. If centred and surrounded by text, the size of block plus four white margins must be allowed, together with space for the caption.

# BEDROCK OF GOOD TYPOGRAPHY

The reader will now have realized the great accuracy of modern type and the wonderful convenience of the point system. A good deal of space has been given over to the latter, but from a practical point of view it is space well used. A thorough understanding of the point system is the bedrock of good typography. A great contribution to fine and accurate work was given to printers with its introduction by an American firm in 1878. But honour where honour is due. To U.S.A. the palm for forcing its general acceptance, but to France the premier honours for its invention in 1737 by one of her great typographers-Fournier le Jeune. Even ghosts, we take it, have feelings on their right to credit for personal attainment—and national pride. It might, therefore, bring further tranquillity to Fournier's shade if we repeat that it was he, and not Giambattista Bodoni, who first gave the name "modern" to that particular style of type face.

Earlier on was given a list of the principal sizes used for

body matter and display. That, of course, was not a full range of sizes. Types as small as 3-point and as large as 144-point have been cast on occasion. For the printing of letterpress posters employing types of 72-point and over, wood letters are mostly used, their size being measured by the "pica line." A 6-line, 8-line, or 15-line wood letter has a shank or body the specified number of picas deep.

# LENGTH OF LINE AND SIZE OF TYPE

Mention must be made of the length of line as it is affected by the size of type used. Every one of us has, at some time or another, come across a setting when we have been left floundering—searching for the next line. might have been due to the margins having been skimpy, the use of solid type where, in the given circumstance, it should have been leaded, or an over-wide measure for the size of type employed. The longer the measure, the farther the eye has to come back for the next line. If the type face is out of proportion to the length of the measure, the eve is liable to lose its way. On the other hand, it will be appreciated how the setting of a type too large for the measure will bring about over-wide spacing and a too frequent breaking of words at the end of lines. In order to avoid making this mistake in either way, we must work to the minimum or maximum length of line to suit the body size which we propose to use. Our measure will be found between these limits. A standard measure for any specified type is laid down as one and a half times the length of its alphabet set in line.

	Minimum	Maximum	Good Average	la Alphabets @ 13 ems
	ems	ems	ems	ems
6-pt.	6	18	12	93
6-pt. 8-pt.	8	24	14	13
10-pt.	12	30	18	161
12-pt.	14	36	24	
14-pt.	16	48	30	19 <del>1</del> 22 <del>2</del>
18-pt.	18	60	36	291

For easy remembering, it will be seen that the minimum is body size in ems for 6-, 8-, and 18-point and body size

plus 2 in ems for 10-, 12-, and 14-point. The reader will also notice that the maximum is about three times, and the good average measure roughly twice the body size in ems.

Type which is leaded will stand wider measure. Within limits, such as with sensibly normal leading and due consideration of weight of face, a leaded setting may be treated for maximum measure as though using a type of a larger size—equal in body to the size to be used plus its accompanying thickness of lead. Heavy leading and extrawide measure is not an appropriate treatment for types lacking weight and colour. The heavy whiting greys them too much, and the length of line appears drawn out and straggly. This greying will be still further pronounced if the old rule of putting extra space between the words, when leading is used, is adhered to. Actually, there is no need for this extra word spacing. "Solid or leaded, space closely" should be the rule to ensure easy reading and a tidy page.

Another great advantage of the point system is the simple and automatic manner with which types of different sizes and of various designs may be set together in the same line, so that their body line or bottom serifs will range in perfect alignment. The principle known as "Point Common Line" gives every type body of a fount with a lower case a fixed depth in points for the portion below the body line and known as the beard. Before the introduction of the point system, this justification for line was a patch-up, pieces of cardboard being used to add to the depth of the smaller type body, so to bring the serifs into alignment with those of the larger.

To-day, dead accuracy is attained by the use of the appropriate point leads or point quads. An alphabet cast without lower-case is known as a titling fount. As the actual face occupies a large proportion of the body depth, these characters are also called full-face or two-line letters. As their name implies, they are used for titles, where a reduction of space is desired between lines of capitals, which would not be possible with a normal letter of the same size which has "descender space" beneath it. They can also be used as initial letters, covering two, three, or four lines of a smaller body type.

Each size of titling letter has a beard of standard depth-

"Point Title Line"—making alignment of different sizes an easy job.

### RULE

Let us now consider the type-high material known as rule. This is made to point-system measurements, either in brass or hard type metal. Plain or simple rules come in various widths of printing face, those in most common use being the "medium" or  $\frac{1}{2}$ -point, 1-,  $1\frac{1}{2}$ -, 2-, 3-, 4-, 6-, 8-, and 12-pt. In certain instances, the body is larger than the printing face, e.g. the medium or half-point face being set on a  $1\frac{1}{2}$ -point body and the medium and point faces on a body of 2 points.

This thinner printing surface is obtained by bevelling—similar to that of an ordinary flat ruler. A "centre-bevel" rule is one that is bevelled on two edges, thereby bringing the printing surface in the centre of the body. If "side bevelled," it is narrowed on one side only, the edge of the rule farther from the bevel being flush with the body. It will easily be understood how this bevel acts as a natural spacing device when such a rule is placed side by side and in combination with another of similar or different size. When full-faced rules are to be used in combination, the spacing white between them is obtained by the insertion of leads of the requisite thickness.

Apart from these plain rules, there are combination faces including two or more rules spaced out on one body. Examples of combination rules are double medium on 3-point body, a 6-point body carrying either double medium or triple medium, and double point on a 4- or 6-point body.

Rules are used as an embellishment, as separation for groups, to form frames for panels, for underscoring words or lines, for the construction of borders, and as "eye conductors" in the advertisement layout. In each case they require careful consideration and handling. The question of embellishment rests with the individual designer. If it adds to the attraction value of the layout as a whole, all well and good; but be sure that it does not detract from the main theme. Looking around, one can come across effects obtained by means of staggered rules,

rules printed in the form of a musical stave with type overprinted in a different colour, skyscrapers built up of rules of various thicknesses, some broken in their length by quads to form windows. By the way, this picture-forming in rules of anything from a battleship to a pianoforte keyboard can be rather fascinating, but as in the case of all embellishment it calls for the double question "How can it be managed—is it really worth while?"

Many good printers contend that "a rule should never be used inside a rule," by which is meant that when there is a border surround, dividing rules should be omitted. What then is to be done in the case of a page containing very little copy which is split into groups? If their inclusion be considered absolutely necessary, the rules should be as short as possible; but before resorting to their use the effect of careful spacing should be tried out, or even the employment of a dainty ornament or floret, of which there are hosts from which to choose.

Is the underscoring of words really necessary for emphasis, when, by the use of italic type, it is possible to keep the page clean and to avoid giving the eye of one's reader the jumps?

### THE BORDER

The frame or border should be designed as a harmonious and quiet-voiced part of the whole layout. It must not sing out over the more important parts. Tone must be aimed at—the tone produced by lines of equal or varying thickness, equally or unequally spaced. Equal spacing makes for monotony, while if unequal it tends to liven by variety. The following are a few straightforward rule combinations. Three-point face worked with single medium or double medium gives two different weights and varying colours, as will 6-point face in combination with either triple medium or double point. Another effect may be obtained by placing the heavy rule in the middle with the lighter ones either side. This is particularly effective in two-colour work, when, for instance, the heavy rule is printed in colour with the light ones in the second colour or black.

When designing newspaper advertisements, it should be

remembered that an "all-round" border takes up valuable space and that there is a limit to the nearness to which we may bring type matter up to it if we hope to retain maximum readability. The main accepted reason for a border in such case is to assist in separating the setting from others around it-but here again the judicious use of white spacing will sometimes enable the designer to eliminate the side pieces, retaining the top and bottom rule in order to convey the width dimension and to act as a head and foot. One cannot be sure that this use of borders as a means of isolation, instead of banking on good "whiting," is not a fallacy. A short time ago, a page of house building advertisements did not show a border between its occupants. One advertiser took it into his head to use a border by way of added distinction. Others followed suit. Net result, the majority have less live space to play with, contrast has been cancelled out, and so they are no better off. At present, the attention-compellers in that page are those carefully spaced, with a simple combination rule at foot.

The frame border has its uses, however. For example, when employed to give a sense of unity to an all-type setting, which, without a surround, would look bald and uninviting. There is an exception to the general idea that a frame of rule tends to convey a sense of restriction. This is when a few words—say in the form of a caption—are surrounded by a thin plain rule, with plenty of white between it and the type. This treatment gives an impression of vastness—on the principle, we suppose, of Einstein's finite infinity. It is a matter of contrast, the rule defining a space which is large for the mass of type. Messrs. John Knight used this idea for a caption when advertising a larger tablet of soap. Rightly balanced, it is a good idea when used for the right purpose, but overdone it is literally and practically "a wash-out."

Good effect can sometimes be attained by using only two or three sides of a frame. The removal of one side forms a letter C; of two sides, an L. the clearance on the open side of these letters seems to invite the permeal of a booklet so treated. Top and bottom rules may be used on a booklet à la frieze and dado; but should we remove the head and foot and retain the sides, we must be careful of the placing

of the type matter. If placed too low, it will appear to be sliding down the "shaft," to fall out at the bottom.

In Chapter VIII we spoke of the half-line tint. Rules are made which carry this half-line texture, as also are stipple and other faces, giving a grey effect. Used in conjunction with those mentioned earlier, they are useful for giving extra variation both in weight and colour.

### DECORATIVE BORDERS MUST STRENGTHEN THEME

What can be said of decorative borders? Mainly that there are hundreds from which to choose and that it would be unwise to single out and recommend any particular examples. Would it be policy to specify a wallpaper or a carpet without full knowledge of the lighting and atmosphere of the room, and the proposed other elements of the decorative scheme? Figured curtains call for a plain, striped or other "neutral-pattern" paper which will act as a foil. Colour also must be considered. A music-room may be given added attraction and atmosphere by means of a frieze depicting harps, fiddles, sackbuts and psalteries, interspersed with portraits of the great composers; but something more formal will be needed to preserve the frigid dignity of the board-room. Where the decoration in the first instance is part and parcel of the reason for the room's existence, the cherub heads of Rubens would somehow be out of place in the second. This is not meant as a reflection on "big business," but as an effort to point out that where strong concentration is needed on a particular theme, any added accessories must either definitely help strengthen the theme or remain neutral—never detract from it.

Where a border is simply a support or definition of dimension, it must be just as simply harmoniously neutral. A booklet for a romantically named perfume may be given a surround of lotus and jasmine—or the nearest obtainable in the decorative borders, which are cast in sections on various sizes of body. There are, of course, other instances where a dainty border could be used for adding atmosphere. It is up to the judgment and taste of the designer. If in doubt, it is always best to use plain rules, which are passive and neutral. This applies particularly in the case of illustrated advertisements, in which concentration on the

theme is of the utmost importance. It all depends upon whether the border is intended to say something or keep quiet. If intended to speak, give it a chance; but in the majority of cases keep it rather on the narrow side—and without dazzle.

We have already spoken of the compositor with his composing stick, setting body matter by hand. From the point of view of the designer of an advertisement, the method of setting does not matter so much as the carrying out of instructions as to the type face, size, placing and measure; but it is as well for him to know something about machine setting. Full specification and working particulars of the various machines would require an expert's knowledge and a volume of space; but for our purpose a brief description of two of the best known—the Monotype and the Linotype—should be sufficient.

### LINOTYPE

Linotype calls up thoughts of newspaper composition, for which it is extensively used. As its name implies, it casts a line of type in one single slug—not single characters. This is claimed as an advantage, especially in rush work, as there is no danger of collapse or "pie" with the solid slug as in the case of a line built up of individual units. Other points of recommendation common to both the Linotype and Monotype are that composition is greatly speeded up, distribution, i.e. replacing type in its case after use, may be eliminated, the type being melted down and recast, thus offering the use of bright, sharp, new type for each job. Duplicates of settings may be produced by either machine without extra keyboard work.

The components of the Linotype include a keyboard, a magazine or magazines containing matrices from which various faces and sizes of type may be cast, casting mechanism and matrix-distributing mechanism, all included in one unit. Two styles of type may be cast from most of the matrices. The keyboard is banked, similar to that of a typewriter. When the operator taps a key, a matrix is made to fall into the counterpart of the composing stick—the "assembling elevator." A line of matrices being set, pressure on a lever carries them to the casting mechanism,

where they are held facing the mould. Molten metal, forced into the mould, makes a cast of type represented by the line of matrices. The slug, rapidly cooled, is automatically removed from the mould, trimmed, and is then dropped on to the tray or "galley." Line by line the process goes on until the composition is finished.

"What about the spacing of words?" the reader might well ask. This is carried out by means of "spacebands" consisting of pairs of wedges, of which imagine one stationary while the other is forced upward side by side with its fellow. As the thin ends of the wedges are moved farther apart, so the spacebands widen, thereby automatically justifying the line.

After casting comes distribution, the spacebands being replaced in the "spaceband box" and matrices in their correct compartments in the magazine. "Almost human" has been said of many kinds of machinery, and it can be truly applied to these typesetting pieces. Distribution is a machine operation. Matrices are taken from the "first elevator," which lowered them to the level of the mould, by the "second elevator," upon the bar of which their teeth engage. They are then lifted above the magazine to the "distributor box," where they are passed on to the "distributor screws." These screws move them along the "distributor bar," which is toothed or grooved in a variety of combinations throughout its length. When each matrix arrives at the point where its matching combination is situated, it drops into its correct compartment in the magazine.

Regarding measure, the mould is adjustable for length and breadth. When leading is required, the cast is made upon a body the requisite number of points larger than the specified type body. By the use of matrix slides and border matrices, rule and decorative border material may be produced.

# MONOTYPE

The Monotype machine casts type by single characters, either for machine composition—to be remelted after use—or in harder metal "for the case" and future hand composition. Spaces, quads, leads, slugs, rules, borders and metal "furniture" may be produced on the Monotype.

It consists of two units, a keyboard and a caster or composing machine. The Monotype keyboard can be thought of as an instrument for making a record similar to a pianola roll which is to be "played" on the machine. The effect of tapping a key is to punch two holes in a paper strip known as the "controller ribbon." At the eye-level of the operator is the "justifying scale" upon which is recorded the width of the letter represented by the key tapped. The ribbon moves forward, and as each subsequent pair of holes is punched, the width of character is added to the reading on the justifying scale. Each of the letters has a relative width, based upon a unit, which is one-eighteenth of the width of the upper-case M of the fount.

As the end of the line is approached, warning is given by means of a light—or bell, as in the case of the type-writer. Justification is brought about by the striking of two keys, the operator previously having noted the total width of the characters recorded on the justifying scale. Whatever the number of spaces in the individual line, they are equal to one another in thickness, over 200 widths being available.

When the controller ribbon is placed in the composing machine, its punched holes might be thought of as the keyholes of the various compartments of upper and lower type cases. Compressed air is the "key," which, passing forcibly through the holes, controls the movement of the "matrix case." The machine revolves, to be stopped in such position that the appropriate matrix is over a mould, and so the characters are cast at the rate of about 150 per minute.

Justification, which is controlled by the last four holes in the ribbon, is brought about by a system of the moving wedge. "Leading" may be included by the method of casting the specified type on a larger body.

In case of likelihood of reprints, the controller ribbons may be kept. The advantage of this "record" system is that expense is saved on further keyboard work and also that there is no need to house and hump heavy and lumbersome formes of "standing matter"—idle metal.

Here, then, are two fine machines, each eminently suitable for the purpose for which it is generally used—the

Linotype with its great speed, eliminating all danger of general collapse of type even in the greatest rush of newspaper work, and the Monotype, which is an ideal machine from the point of view of the general printer, owing to its facility in producing type for hand composition besides being a setting machine.

### AIM AT ERROR-PROOF COPY

Whether the copy be set by hand or machine, the aim of the author and compositor should be for a "clean proof" a setting in which errors are conspicuous by their absence. No man is infallible, and errors must be put right before the job comes to the machine for the final running off. As type is set, it is placed upon a tray called a "galley." The rectangular block of type is tied round with a length of twine—or "page cord"—and is then ready for proofing. The "galley slips" may be produced by means of a simple hand roller which is run over a piece of paper placed over the inked type, or on a more elaborate proofing press. Other types of proof are the page pull, trimmed to size, with correct margins, showing the page as it will finally appear, a "paste-up" consisting of a pull of the type matter with illustrations pasted into position, and a proof of the completed piece. However, whatever manner of proof comes into our hands, the main concern will be with the correction of error, now and on the spot, so that no trouble will arise at a later stage, bringing with it a holding-up of workmen and machines. After the galley proof has been corrected, it is best, if not too sure of things, to ask for a "revise" proof.

In dealing with copy, be certain all the way. Make sure the copy is correct in wording, spelling, grammar and punctuation before sending it to the printer. The compositor has enough of his own troubles without worrying about those of the author. When setting, his motto is "Take as written," and after the proof is passed his defence is "Taken as read." When proofs are submitted and a mistake sneaks through, it is simply unfair to tell the printer that he should have noticed it. Due care will obviate the necessity of placing blame even on oneself. Always work from the point of view that the setting is

PRO	OF-READER'S CORRECTION MARKS				
l.c.	Lower-case where underlined in text.				
rom.	Roman face				
bold	Set in bold				
italic	Words underlined once — in text.				
small a					
Caps	,, ,, thrice ≡in text.				
caps	Battered character.				
w.f.	Wrong fount.				
07	Delete matter crossed out in text.				
stet	Let underlined with dots remain. De-				
	leted in error.				
#_	Space out where indicated.				
حے	Run on matter. No new paragraph.				
	Raise type indicated.				
	A space has risen. Push it down.				
^	Caret mark. To indicate where matter in				
	margin is to be inserted.				
<del></del>	Dash where indicated. Accompanying figure				
$\overline{}$	tells length required in ems.				
$\stackrel{\bigcirc}{\Box}$	Close matter up.				
	Insert space or indent paragraph one em or the number specified in the square.				
ب	Move to the left				
11	Move to the right				
, ~	First part under a word and second over the				
•	next with trans. in margin. Transpose words				
	Move to the left.  Move to the right.  First part under a word and second over the next with trans. in margin. Transpose words indicated.				
ඉ	Letter marked in text, upside down, to be				
	reversed.				
0	Full point or other punctuation mark may be				
	shown thus or ;/ in the margin. Indicate				
	where required by caret mark or by crossing				
	out error.				
サチ	Quotation marks or apostrophe. Indicate in				
- •	text with caret, with appropriate signs in				
_	margin.				
7	Is this right? Query. Refer to author.				
///	Straighten here. Type out of alignment.				

There are quite a few more than those shown in the above list, but it is sufficient as an average working collection.

to be made into an electro which, once made, cannot be altered. Thought of expense of a mistake will tend to bring about extra care.

Keep a clear head and a critical eye. Do not take for granted that the copy is as it is meant to be. For instance, wrong letters might slip in and must be seen. The author and compositor might both know how to spell, but if the mind is more concerned with that which the word represents—the sense—than with what is actually printed, the mistake is liable to be missed. For instance, Big Ben is seen neither at Westminister nor Westmister.

If it be found necessary to alter words, strive to substitute others equal in length to those displaced, otherwise it will mean the upsetting of spacing and a consequent necessity for the rearrangement of lines.

A list of proof-reader's correction marks is given opposite. When marking proofs, indicate the correction in the text as well as writing the correction symbol in the margin. Should there be a large number of corrections, it is a sound idea to number them in both margin and text.

### CHAPTER XI

#### LAYOUT-THE PLANNING OF PRINT

DISPLAY—Spacing and "whiting"—Proportion—Composition—Harmony—Contrast—Unity—Balance—Hints for finding the balance—A useful exercise—Creating atmosphere—Lines as a part of composition—Unusual treatment—Symbolism—Sex appeals—Avoid ambiguity—The curiosity motive

In the chapter entitled "Shaping the Copy" a list was given of eight component parts of an advertisement, some or all of which might be incorporated in a piece of selling print. When writing the copy, a certain method of appeal was adopted. As in the case of the copy, the illustration is designed with an idea behind it which is the germ of a selling plan. From the point of view of this plan, some of the components will be of more importance than others and for this reason must be given greater prominence when the time comes for knitting them together into one entity.

The compositor is the second pair of hands of the advertisement designer and if he is a first-class man might possibly be capable of turning out the "raw material" in half a dozen different settings. Each of these settings, however, might not run parallel with the preconceived selling scheme, while all such suggestions would have to be paid for. If the compositor had to worry about each individual client in this way, he would have very little time in which to practise the important material side of his craft. This is the reason for the layout—the means of telling the compositor what is required in the way of general setting and display. The layout artist—the trained man—might be recruited from the ranks of art-minded printers and print-minded artists, but in addition to his twin knowledge of art and craft, he must also possess the more commercial sense of selling through the means of the printed word.

We design advertisement print with the idea of gaining the widest range of most attentive reading. We must arrest and interest, at the same time making such impression that the reader will tell *himself*, "The best—invest!" Before he can do this, he must absorb the purport of the mass of matter which is placed before him. It is now the time to realize that the average reader is not in a hurry to read our announcement. In the majority of cases, he has no wish to do so. We must therefore overcome his unwillingness through the enlistment of his interest, by placing the salient points of the proposition more directly in front of his eyes. This we call displaying the setting.

#### DISPLAY

There is display and display. We might pick out the main factors and set them in bold type, all lines of the same large size. Would this help? With, let us say, eight display lines, as seen in some of the old advertisements, he will have a one in eight chance of picking any particular line and the most likely consequence is that he will "see" none of them. Barring accident, no particular line will attract, and attention must be attracted before interest can be fostered. Display might certainly be described as the subject epitomized, but presentation of a table of contents, each item equal in weight, is useless when attention has to be attracted and sequence preserved.

This, then, is what is required of a good selling layout—greatest attention value through the presentation of a dominant idea by means of one dominating display line, the other and subsidiary factors being set in logical order and in weight according to importance. Thus we evolve a setting which will lead the prospect to read the message in the order in which we intend it to be read.

The main factor of good display is variety in colour, spacing and size of groups—not through the use of a multiplicity of different type faces. Work for legibility, clearness and simplicity with strict avoidance of frills. Be original. Watch proportion. Variety is a good thing, but it must be ordered variety, which is brought about by keeping a keen eye on the weight and value of the various features in relation to one another and to the whole ensemble.

### SPACING AND "WHITING"

Spacing and "whiting" can greatly affect the dominance and colour of any particular component. All cats are grey by night—background is a very deciding feature when considering distinctness. Without light, there cannot be sight. The further away an object is placed from us, the smaller it appears and is less likely to gain attention than another of the same kind which appears larger by its being placed in the foreground. This principle of ordinary perspective is exemplified when we use a smaller size of type for a less important item of display. Inversely, when we set a display line in large type, we bring that line into the foreground where it stands a stronger chance of notice than the smaller and less important line.

Now let us consider the principle of aerial perspective, or the atmospheric effect on tone and the definition of detail. Without taking into consideration special circumstances regarding brilliance or dullness of light, let us imagine that we have two objects—one black and the other white. They will appear as black and white when placed in the foreground near the observer, but as they are moved away towards the horizon, the light object will appear darker and the dark one lighter, until a point is reached when both appear as an intermediate tone of grey, neither as distinct as in the first place.

How does this apply to a typographical setting? We know that a distant object appears smaller and that a small object is not noticed as readily as a large one, also that distance affects distinctness of detail. Full distinctness of detail depends upon the play between dark against light or light against dark. We have this condition to the full with our objects in the foreground and at its minimum when our objects, greyed by distance, tend to merge with the background as a tone of grey. We see an object through the medium of light reflected from it or around it or a bit of both. To preserve the white or light is our concern when working for our plane effects in layout construction. Maybe this illustration by means of the principle of aerial perspective is not an exact parallel, but through it the reader will appreciate how a small display line with adequate "whiting" will be more distinct, and more of a foreground piece, than a large face of type lacking the requisite white to show it up by contrast. It is not that that larger type is any the less black, but that the main consideration, the means to attention, distinctness, and easy reading—white—has been greyed to its limit. In other words, it has been placed, from the point of view of our illustration, farther away from the observer.

#### PROPORTION

When there is plenty of room for display, there is no need to use over-large type. Such practice, in fact, defeats its own object. Work to proportion. Display clearly the main heading, which must not make the layout topheavy. Graduate the size of other display lines according to importance and then bring them into the foreground by means of adequate "whiting." In this way, all will be on the same "reading plane" and size alone will decide the order of selection.

Layout is a branch of commercial art, and to a great extent incorporates the principles of other arts, for example, painting and music. It must, however, be artistic from a practical point of view.

A layout, although perhaps as pretty as a picture, ceases to be artistic when the designer has lost sight of the reason for its existence—to sell goods—and more goods. It is the presentation of a business proposition. It must not only be good to look upon but alluring and easy to follow and read. Here are some of the principles, common to all arts, which should be applied to layout construction.

### COMPOSITION

This includes not only single items of which the whole is composed, but how they are put together; their weight, value and position in the layout; their arrangement as one likely to have the strongest effect in the way of attracting, interesting and impressing the prospect. Monotony means death to any layout. It has been pointed out that variety is the life of display. Variety in composition takes the form of what is known as "artistic inequality." No two components, groups, masses or spaces should be equal, and the width of any group should not be the same as the space between that group and a margin. In order to appreciate this, imagine a square illustration with one edge set to a margin, and with a space of equal width extending to the

other margin. Sketch it out, or better still, try to visualize it. You will agree that it looks all wrong. Better effect will be obtained by moving it to the right or left, as the case might be, until it is in such position that the "artistic inequalities" of the block mass and the two different widths of border appear "just right."

Comparing our layout with a musical composition, let us think again of the advertisement using eight display lines of equal weight. It is comparable to a sequence of equal notes of equal pitch—a dirge calculated to bring on a fit of the miseries. Contrast it with the setting into which change is introduced and which we immediately associate with the appeal of variety in melody. The amount and degree of change will, of course, be adapted to circumstances. Modern "syncopation" cannot be accused of lack of change and in many cases there is very good melody, but in certain instances some of its effects are strident and unattractive. When a trumpet is overblown, tone is liable to be paralysed, attention deafened, and something beside the instrument to be blasted. This warns us to keep an eye on harmony—and restraint.

Our spaces and whiting might be looked upon as musical rests or even as soft notes opposed to louder ones. In the case of the block placed with an equal width of white to one side of it, we have the equivalent of a great burst of sound followed by an equally lengthy period of dead silence which is not even a pause for artistic effect, whereas, with a border of white either side, we have the equivalent of "soft, Loud, soft" or "high, Low, high"—rhythm and melody. If this be too poetical, think of it as pleasing contrast and interesting irregularity of setting. We obtained this when we "split the white," whereas with the mass and white equally balanced, the block appears to have been shoved into the corner, where it is wedged and incapable of any further movement in the direction along which it has been moved.

### HARMONY

The dictionary definition of harmony is: "A fitting together of parts so as to form a connected whole, agreement in relation: in art a normal state of completeness and

order in the relation of things to each other." It can also be thought of as a state in which units of a community are living together in tune with one another. Harmony is directly opposed to discord and a unit which is not in tune with itself is liable to upset the harmony of the whole.

Let us fall back on our musical parallel. Every so-called single note is, in reality, a combination of several. It consists of a basic note which is reinforced by other tones of higher pitch and which are known as harmonics or partials. When these partials are correctly balanced we have a harmonious musical tone, but should certain of the harmonics be over-assertive, the sound is less pleasing, out of tune, or may even become a noise. Notes of similar key, struck in unison, bring about the sounding of a harmonious chord, a combination in which each contributes to the general effect without being over-assertive.

What it amounts to is that single notes which are of even tone in themselves and in harmony with one another, when sounded together form one column of even tone. Commencing with plain white paper, we have one clean, level tone. It is, however, the harmony of a desert waste—uninteresting monotony. Draw a picture, then add further lines and groups—notes of similar colour. Our finished layout will be comparable to one great chord which, although made up of individual notes, blends into a volume of level monotone.

If we display heavily one single word in the body of any group, we upset the harmonic balance of that "note." Being out of tune with itself, it will have the effect of marring the harmony of the whole "chord" of which it forms a part. That one misplaced displayed word is a discordant "partial" spoiling the harmony by assertion out of proportion to its importance. Underlining of words and spotty display will ruin the harmony of any setting. An emphasized word should be read in the copy and not apart from it. Underscoring and spotting calls attention to words so treated before it is their turn to be read. Italic type, while giving as full a measure of emphasis, preserves the general colour of the group and the harmony of the whole.

Harmony in its truest and quietest sense means one level tone and absence of contrast and stress. There are times when such harmony is desirable in a layout. It can suggest cleanliness, repose or even dignity. With display of larger-size types in the setting, it is saved from absolute dead monotony although the setting is of one colour. We have contrast in the size of display lines, which, again to use our musical terms, are the keynotes of the chord—the "dominant" and the "leading notes."

All this does not mean that we must use only one weight of type in order to attain harmony. In fact, it is possible to use two faces of equal weight and colour and obtain a result which leaves much to be desired. The matter of living together in harmony depends upon units possessing something in common. With type faces it is likeness in design which counts. There is, however, such a thing as harmony of contrasts. One chord can be a harmony in itself, but several contrasting chords may be interspersed to form a harmonic theme. Certain notes form one series of chords, while other chords are formed by contrasting notes-light masses in our layout intermingled with bolder display lines. Chords in a musical progression should have something in common and intervals should not be too steep. From this we take a pointer regarding the harmony of contrast in layout—types although contrasting in weight, should not be too far separated in pitch of tone, and must be related in their style of formation and design.

The use of old face with modern makes for discord. The use of two different and unrelated script faces in a layout is rather certain to set up a rumpus. Script type, being of "hand-written" style, has a personal touch. For this reason, two such faces in one setting seem to suggest two individuals endeavouring to boss the show.

Beside harmony of colour between groups—which includes illustrations—attention should be given to shape and proportion. Masses should be similar in their proportions to the general shape of the whole. For instance, squat and square masses look out of harmony in a long, narrow space.

### CONTR. AST

When an object differs from, or is opposite to others with which it appears simultaneously, or which precede or

follow it, the attention value of that object is likely to be strengthened. A further principle on which attention value depends is the absence of counter attractions. The employment of contrast should be an endeavour to reduce the strength of counter attractions to a minimum. Contrast may be employed within the layout in order to fix the sequence of reading, the stronger side of contrast being allotted to items in proportion to their importance. It may also be applied to the layout as a whole, making it different or opposite, thereby, through the intensity of sensation it arouses, forming a stronger attraction than other advertisements with which it appears.

Contrast is the play of one element against another—colour against monochrome, light against dark, large against small, long against short, decorative against plain. Contrast involves emphasis, and emphasis can be overdone. The emphasizing of too many components in a layout reduces the value of contrast, and if the contrast is not properly graduated, each of the emphasized items becomes a counter attraction to each of the others: really effective

emphasis is cancelled out and contrast is flattened.

Within the layout, we might bring about good and strong contrast by special treatment of the illustration, or by the restrained and judicious inclusion of a minimum number of words, displayed as a heading or nameplate, in a shaded, tooled, decorative or hand-drawn letter. The influence of such contrast might be made to extend outside the layout. The problem of counter attraction must be ever present in the mind. A magazine advertisement in colour, sandwiched between two others printed in monochrome, is likely to attract special attention on account of its being different from the one in front and the one behind. Each advertisement, set on a page to itself, is viewed as a separate entity immediately and in the first place—no need for its singling out from a mass of others. The extra attraction value of the particular advertisement, apart from reader interest, is likely to be due to the use of colour.

The majority of advertisements are, however, printed in monochrome and are set side by side in competition with several others. The designers of these other advertisements are also striving for contrast and the elimination of counter attractions. The wiser ones among them realize that you and others are striving for the same thing, and so, by means of good display, endeavour to make their effort as "solus" as possible—to stand out alone in the page. Filling the space to its limit will not bring this about but will only tend to fuse the layout with surrounding matter. We have white space to help us. "Whiting" might be thought of as the sounding board of printed speech, or the ground of the layout, upon which the message is raised in relief.

Use the white space to separate your setting from other matter on the page. If your neighbour is of similar mind, the help will be mutual. On the other hand, if he is one who delights in blacking and choking space, he will assist in showing, by contrast, how clean, well displayed and attractive a layout—yours—can be. Another pointer to contrast may be found by studying the style employed by competitors—especially of illustrations. Mostly drawings? Use a photograph if technically practical. Photographs? Try pen drawing or scraper board.

#### UNITY

Applied to a layout, this can be described as a sense of oneness, the agreement in effect and theme, the forward movement in agreement of all the parts of a composite whole, under the leadership of one head. Each part, although differing in weight from another, must definitely belong to the whole and each assist continuity. Unity might also be described as harmony—but it is a disciplined harmony applied to the whole organization. In a layout, we might have two harmonious sections, but if those sections are mutually inharmonious, the whole is robbed of its unity. It is really a repetition of the principles of good display, where the "superiors" must have the main say. Where an inferior unit is allowed to shout and become over-assertive, division and conflict is liable to be brought about.

The setting of a secondary display line in too heavy or too large a type, or in a face which is altogether different in design from the general scheme, is liable to promote that line to the position of leader of a separate section. Generally speaking, the practice of setting certain sections of body matter in bold type is a bad one. In the first place, if the copy is written in logical order, is this undisciplined bawling necessary? It certainly succeeds in throwing the remainder of the copy into the background, but if such black mass does not happen to fall in the right place in the layout—which it seldom does—true, telling contrast is killed, the harmony of the setting is done for, the balance of importance is upset and the march of the common theme tripped up at its first step. All these must go hand in hand if we wish to preserve unity.

Whiting-out is a fine thing if we watch how and where it is placed. To give a group breathing space is quite correct, but complete isolation is another matter. A white line or blank surround, when out of proportion, can split a layout in half or give the impression that the group "has no connection with the firm next door."

Watch this in the first place when positioning the main heading. While allowing enough whiting for good, contrasting display, set the line near enough to the illustration so that they appear to belong to one another. With other considerations in order, the proper balance of white space can greatly assist unity.

We have dealt briefly with unity from the point of view of effect. There is also unity of theme to be considered. Illustration, copy and general layout should be a unified whole, combining in the development and expression of a single idea. Nothing should be included which is not a help towards this end. Anything irrelevant should be rigidly excluded. A theme of spring, for instance, should be spring from top to bottom. A murky, heavy illustration would be a negative to the crispness and freshness associated with that season, as would a heavy display type, suggestive of lumps of coal, be out of its element in association with the fragrance of a perfume, the fine smoothness of a face powder, or the dainty charm of a set of silk "undies." A layout advertising a physical development course by a well known strong man would not include types of a feminine character. That would tend to "cissify" a caveman theme. Any frills and make-up added to the pure "business" announcement, e.g. filing systems, banking or insurance, will rob it of its level-headed efficiency

and impress the reader as a parallel to "wasting the firm's time."

### BALANCE

As a general classification, the "blot" of a layout may be either symmetrical or irregular. The former can be made to suggest calm repose, the inertia of perfect balance, while the latter may convey an idea of the momentary poise of lively displacement. In either case, balance between the various components, and in relation to a common point of equilibrium, is absolutely necessary if the setting is to appear as a pleasing unity. In symmetrical balance, as seen in the classic style of title page, the twin halves seem to be in a condition of stationary equipoise, either side of a central line—the main effect of balance is transverse. With the irregular layout, we have several components of different weights, placed at varying distances from the point of balance and from one another, set in an arrangement which suggests mutual poise and natural order.

As broad subdivisions of the irregular layout, we might mention the diagonally balanced style and the free style. In the first, the masses are balanced obliquely—a group to the top left being set off by another lower down and to the right, or vice versa. It might be constructed so that the balance of masses is in one direction only, or the groups might be placed in a more squared-up setting, so that the weight of masses appear to balance one another in two directions diagonally in the four quarters of the space. The free style incorporates the balance seen in a picture, which does not concern geometrical equality but comparative weight of mass, interest value and movement, together with harmony and unity. All layouts and all pictures should have a focus of interest and a point of balance, and balance is the correct poise of weight of the various items against a basic group.

Balance suggests leverage by weight either side or around a certain point. Equal weights may be balanced either side of a point as in the case of a pair of scales. Unequal masses call for the principle of the first-order lever or see-saw, where the heavier weight is placed on or near the centre of balance and the lighter mass proportionately farther away. Weight, from a typographical point of view, concerns not only the area occupied by a mass, or the size of face of a line of type, but its solidity or comparative depth of tone—what might be thought of as its specific gravity. A heavy heading might be placed so as to balance a larger area of body type. The heading is heavy and there is comparatively little of it, while the text is lighter but there is more of it to make up the weight. As an analogy, we might think of what might be done with a given mass of artist's pigment. It could be concentrated as body colour in a small area, or the same weight of material might be made to cover a much larger area of less solid colour in the form of a wash. Weight can depend on size, area, and concentration of tone, judged separately or together, i.e. where two masses are of equal colour, size of area decides the question of weight. It should be noted that despite its actual weight, a mass becomes "heavier" if it is of great interest or importance.

When dealing with the symmetrical layout, the transverse balance is already fixed. We simply place the lines or groups in such position that the centre points coincide with a vertical line marking the centre of the width of the space. Our main concern is the placing of these masses under one another in correct position according to their importance and with regard to the centre of balance, which, in this case is a fixed point in the space, irrespective of its size and proportions. The balance in a vertical direction must, however, be watched. The setting must not appear to be divided into two equal parts. Although the main weight of a layout should be concentrated at the top, beware of the top-heavy setting which tends to "revolve." It is the business of the longer "arm" below the optical centre to keep it in upright balance, an application of the see-saw principle.

### HINTS FOR FINDING THE BALANCE

The first step towards finding the point of balance for the symmetrical type, is to draw a vertical line to divide the space into two equal parts. If we place a spot half way down this line, we find the dead centre of the space, but the position of the spot will appear unsatisfactory as it will







This is how an idea of comparative tone colour may be suggested in small compass—the maximum dimension of each of the originals being under 21 in. The drawing of these miniatures is not only rather fascinating but a useful means of training the eye to appreciate balance in mass and colour. Placing four to the page, try filling a sketch book with some of your best ideas. It will form a handy volume for reference, inspiration and possibly of recommendation. "He who can do most, needs do least" may be applied to the drafting of visuals and layouts, but it should be realized that the very bald sketch by the expert is augmented by a very clear-seeing "mind's eye." and complemented by highly developed capability of thinking in styles and weights of types and pictures which will reproduce exactly the effect aimed at. Such visualization is sometimes a gift or natural aptitude, but more often the result of application and training. Anyway, bear this in mind: whether your visuals and layouts are "time-savingly" rough or "expensively" neat, there must be no "hit or miss" about it. The published result must be intentional and not the outcome of a fluke. If the printed piece turns out a good deal different from our visualization (even though better), let us not be happily satisfied. Best get down to it and find out the reason why. In our earlier efforts, a carefully drafted visual can be a very helpful guide to the selection of components. We may, as far as possible, match the weight from our type specimens, perhaps building from the tone of a key component. This practice of "matching" will eventually develop ability to select through sense by experience. Later on we may, if we so please, make our layouts the scantiest of skeletons, provided we furnish our "visualization" in the form of adequate working instructions—and do not slang the compositor if the result does not come up to expectation. After all is said and done, good money spent on expensive newspaper space surely merits a little (or much?) thought and trouble on the problem of transforming plain paper into an attractive and "selling" announcement.

Fig. 2 illustrates Symmetrical Balance, which has been described as "equal weight either side of a vertical line—like a vase." This has been based on the shape of an egg-cup for a change. 1. Diagonal Balance in a single direction, reminiscent of the poise of our very youthful efforts with toy bricks. 3. Two-way Diagonal Balance with transverse contrast in size of masses. Really two columns side by side, the one being top-heavy and in contrast with its bottom-heavy neighbour. 4. Free Style or sense balance as opposed to mechanical balance. If we turned the figure round and placed him to the left, we should find ourselves with diagonal balance of a kind. Fig. 5 shows how height of space may be emphasized by a marginal illustration. Receding depth may also be suggested by perspective; telegraph posts, for example. 6. Focus on Special Feature or Interest, in which detail must be very clear and distinct. 7. Irregularity of design lends force to the small space. Forceful heading consisting of least number of words. Note a common mistake in this "setting." The words "irregular shape" do not properly connect. Too much space separating when compared with indentation from box rule. seem to be sliding downwards—an optical illusion. The mechanical centre is not the optical centre. The centre of balance or optical centre is fixed by placing the spot in a position roughly three-eighths or one-third of the distance down the line from its top end. This division of the line is based upon the principle of "the golden section," in which the lesser part bears the same ratio to the greater, as the greater does to the whole—3 to 4.854, or roughly as 3 is to 5. The line being divided into eight parts, the point at which the upper three-eighths is marked off will be the optical centre.

If we draw a horizontal line through this point, we divide the space into two parts which balance optically in a vertical direction. Although not mechanically equal, the "halves" seem to balance in a satisfactory manner. When a single mass is to be displayed in symmetrical balance, it is a matter of distributing the weight "equally" on either side of the line. This comes about when the optical centre of the mass is coincident with that of the space. With two masses, a heavier one above and a lighter one below as in a title page, the parts must be made to balance one another on the see-saw principle. The two masses—cut to shape out of tinted paper is helpful for a start—should be moved higher or lower until they appear to be in their correct relative positions.

The addition of further components will call for adjustments in order to preserve balance. For instance, a large or heavy mass might be well balanced on the optical centre, but if we add components above and below it, we must give careful attention not only to spacing but to the respective weights of the additional items. On the other hand, if we take a well-designed title page incorporating four or five lines or masses, we shall perhaps find that the main mass is placed high, well overlapping the short half of the see-saw in order to balance the smaller masses below. Remove the middle components, leaving only the top and bottom masses. It will most likely be felt that they do not balance one another and that unity is non-existent. A sense of poise, to which all the components contribute, must be felt either side of the point of balance. With the full number of components included, the title page balanced. With only the

extremely placed masses retained, there is, as children playing see-saw would say, "too much pudden" at the top. If we decide to use the two components only, the upper mass must be lowered the requisite amount towards the centre of balance, and most likely a small adjustment made to the lower mass.

Attention must also be called to the placing of unsymmetrical ornaments, and illustrations which are not squared up. For example, imagine a silhouette drawing of an old spinning wheel. If we placed this with equal parts of its width either side of the vertical line, we should have the weight of the big wheel to one side and only a small horizontal mass to the other. Such illustrations should be moved about until they appear to be in the right position and equally balanced. With a small ornament or illustration, the merest fraction of an inch is likely to count. In some instances, however, the illustration will look quite well when centrally placed. Experiment will decide.

### A USEFUL EXERCISE

Dealing rather at length with the symmetrical layout, we have seen that the heavier masses come nearer the centre of balance and that poise should be evident in both transverse and vertical directions. The irregular style is rather more difficult to handle for good result, but the principle is really similar. The weight of mass should be evenly distributed over the four quarters of the space. In order to get the feel of this irregular balance, it is good practice to select a few newspaper advertisements built upon this plan, and to dissect them from a geometric standpoint, noting how a rectangle or other shape—say to the left—is balanced by another to the right. Trace the space area and the position of the shapes on a piece of greaseproof paper—as good as tracing paper for the purpose but less expensive—and keep for future study.

The point of interest will, in many cases, be placed to one side or the other of the central line. A method of finding the position of the point of interest in a picture, and in many cases in a layout, is also based upon the principle of the golden section. Draw a diagonal line from corner to corner of the picture or space area. From an adjacent

corner, draw with a set square another line at right angles to the diagonal. Round about the point of intersection will be found the focus of interest. All these mechanical principles are, of course, for guidance only. A layout designer will not be bound hand and foot by them, particularly when dealing with the irregular style. He must rely as much as the pictorial artist on his sense of good arrangement. This will be made easier if he bears in mind that the main weight of a layout, which is a piece of reading matter, should be at the top, and that the reader must be guided from beginning to end through points of interest of varying importance, as in the case of a picture. This path of interest should trace a line which is in balance relative to the space. A sickle is irregular in shape, but it can be drawn so that it appears to be in good poise on the background.

### CREATING ATMOSPHERE

The foregoing principles are intended to assist the optical appeal of the advertisement; to make it hang together in a pleasing manner as an inviting and readable entity. Now for an outline of a few points which might help make the layout impressive—creating atmosphere, making suggestion and inviting inference. Atmosphere is summed up by the would-be-dramatic writer, when he states: "A sense of repose" or whatever it might be, "pervaded the whole scene." The second word of the sentence tells us that it is an appeal to senses or emotions. We can introduce it into the illustration or suggest it in the type. General darkness tends towards depression, light and airy towards gaiety, but a cleverly graded play of light and shade can suggest a sunny atmosphere.

Illustrations for suggestion or inference must be clear as to their meaning. The whole tale must be told at a glance. A pair of slippers before a fire suggests home, ease, comfort, rest and preparation for a warming welcome for Father. That one is quite straightforward. Now, let us consider a plain and unalloyed picture of a ruined house. Alone, what does it suggest? Exactly nothing! What was the cause of ruination—an explosion or a six-ton lorry? This is sufficient to show that, in certain instances, perception must be aided by the inclusion of a reason for the

Continuity of theme and "the path of interest." The irregular, dark mass across the centre of the layout incorporates the meat of the whole advertisement, particularly as the subject is a well-known commodity. First comes the name which is well known, then the package which is almost equally familiar, and finally the offer at a reduced price. A further recognizable feature in the advertisement is the "Ivory Castle," If nothing else is read, the message still stands a splendid chance of getting across. This illustration also shows how an irregular mass may be placed, in order to appear in balance relative to the space. Up to a point, this central mass follows the line of a sickle, mentioned earlier in the notes on balance in layout. Although its general "blot" is irregular, there is also a suggestion of diagonal balance, the boxed panel at top weighing against the copy mass below, "Gibbs" against "6d.," and "Solid Denti-frice" against "Now re-



duced to." Having taken in the first-time message, the eye is led back to the lower panel of copy by the downward movement of the white "ribbon" on which are inscribed the words: "Now reduced to . . ."

Reproduction of this analytical diagram and of the original advertisement is by the courtesy of W. H. Gibbs, Esq.

state of affairs. In this case, a house-breaker, complete with pick, perched on one of the walls—or maybe, in these days of ultra-civilization, a discarded rifle and gas mask in the foreground—would explain it.

Action or movement may be suggested. In itself, a picture is static and therefore it must suggest the likely conclusion of the circumstance depicted. A horse may be shown jumping a fence. His movement is in a forward direction and space should be allowed for his landing. A goalkeeper may be shown making a save, hugging the ball and with his two feet on the ground. The effect will be stronger, however, if he is depicted in the air, jumping upwards—supposedly on the principle that "whatever goes up must come down."

### LINES AS A PART OF COMPOSITION

Lines may be made to impress by their direction. Horizontals suggest a still, inanimate calmness. Might, grandeur or slender grace—according to circumstance—are suggested by the vertical line. Oblique lines are coupled with movement and action. As illustration, let us imagine that we are enjoying a calm day, sitting beside a pond, on the bank of which is a tall, straight tree. The tree represents slender grace in its vertical straightness, and the pond gives the impression of an unruffled horizontal plane. Suddenly, a gale springs up. The tree is bent over obliquely in a curve and the surface of the pond is broken by waves, which could be drawn by means of oblique lines.

The athlete "at attention" stands vertically straight, but when running, his body slopes forward. A picture of a cliff or cañon, showing its height up or depth down, can be made to appear grand, mighty or awe-inspiring—more so if, by means of relative scale, the insignificance of a man or house at top or bottom can be appreciated. The vertical iron framework of a skyscraper also suggests might and grandeur; the stretching upward of great work in progress. Its horizontal girders are a repetition of the immobility of its base line—terra firma. Speed is infinitely more easily appreciated when the moving object is near to us. For this reason, a photograph or drawing of a racing car or an express train is usually depicted "in passing,"

arriving at an angle and with full advantage taken of the sloping and receding lines of perspective.

This suggestion by means of line direction can, at times, be quite handily applied to the typographical side of the layout, but its use should be tempered with judgment, restraint and reason. The whole setting might be set obliquely in the space; the text mass in the shape of a rhombus instead of a rectangle, or set in a gentle curve; a word or words might be set vertically, although seldom to be recommended. It should, however, always be remembered that the normal direction of type line for easy reading is horizontal, and too many gymnastics are liable to make the reader giddy, if not sick.

Eye movement from side to side is easier than up and down. Judgment of length depends upon eye movement. When the road is easy, the way seems shorter. For this reason, a horizontal line appears shorter than a vertical one of the same length. Applied to a layout, in the form of vertical rules or as a marginal illustration, we can stress or exaggerate the vertical measurement of the space, or perhaps give the impression of vaulted vastness, a floor to ceiling effect, or a feeling of closeness to a tall object—a radio mast, telegraph post or a palm tree.

### UNUSUAL TREATMENT

The strength of sensation which may be aroused by unusual treatment of the illustration should not be overlooked. In these days of live commercial art, it might be wrong to term anything unusual, but striking effect should be aimed for in some way or another. For instance, the artist of a bygone age, when dealing with an illustration for wine, would possibly have drawn a figure pouring out a drink with the bottle parallel to the observer, whereas the modern artist might think the effect stronger if he drew only a hand holding the bottle. The imagined possessor of the hand would pour the drink towards the observer and advantage would be taken of exaggerated perspective in the treatment of the bottle.

In appropriate cases, the suggestion of making the reader "one of the party" might help. The supper table as viewed from above, from the point of view of a seat reserved for the

observer. An empty and very easy chair, a table at elbow, the concentrated beam from a shaded light, a book and the box of cigars or bottle of whisky complete with soda siphon might be an invitation to settle down to a spot of quiet enjoyment. It might be drawn at eye-level or from the point of view of a standing observer. Lighting and shadow effects are often very useful. A shadow may be suggestive of rest, obscurity or even awe. Part of an illustration might be thrown into shadow, with the important part emphasized by strong lighting. The purity and sparkle of a good ale can be noted by holding the glass up to a strong light. To the advertisement, its illustrated goodness is illuminating. The material subject of a drawing or photograph might be half concealed, the curiosity of the observer being satisfied by a brilliant reflection in a mirror.

The subject of an advertisement can sometimes be made "different" by calling special attention to a peculiarity, or by focusing upon a certain item or section. At one time, Guinness advertised "the ruby gleam" to be seen in their famous stout—but it was a gleam with a reason behind it. Isolating rings are used by the Rawlplug people, to show where these handy pieces may be usefully employed. A similar ring and arrow is brought into service in advertising the Radiation Cooker, in order to draw attention more strongly to the Regulo attachment. Instead of a plain circle, a magnifying glass can sometimes be pressed into service, e.g. where the special weave of a textile is to be shown up as a strong selling point.

#### SYMBOLISM

Symbolism may sometimes be included, with the idea of strengthening the theme through the means of association of ideas. Well-known simple symbols include wings for flight or speed, the lily for purity, the lion for strength, the owl for sight, the horse-shoe for luck and the oak for durability. Symbolism might incorporate the whole illustration or appear as a separate mark, but in either case, its meaning should be as clear as broad daylight, not only to the designer, but to all who are intended to see it. The statue of Lord Haig, in Whitehall, is an illustration of this.

Many observers (judging by letters to the newspapers), would like to have seen something more prettily natural. Never mind if Haig and his horse were never the colour depicted, everything would be better if the shapes were nearer to nature. The sculptor has, when effect is considered, worked in symbol. We can think of the horse as a great army under the control of the man. It is depicted in a pawing attitude, eager to get away. The neck and the head—which is held by a tight curb rein—are strongly emphasized. The man, however, is master of the horse and sits there in all his natural calmness. The whole is meant to typify the man and, in plain words, to show his calm handling of a tough job. Symbolism is only suggestive inasmuch as it is appreciated. In this case, it seems that the suggestion is too subtle to be appreciated by the majority.

With the small-space advertisement especially, irregularity can assist in making it more noticeable. The use of geometrical shapes—circle, triangle, hexagon, octagon and rhombus, particularly when broken by a major component, can be quite effective. Borders broken by type or illustra-

tion might also be useful.

Hand-lettering, when properly used, can convey atmosphere and distinction, suggesting period and character, or reinforcing the theme by feeling. It must suggest reason for its use. As it depends upon contrast for maximum effect, a little at a time will bring out its greatest strength.

### SEX APPEALS

A good deal of advertising takes the form of an appeal to the instincts. After self-preservation and the satisfaction of hunger, the instinct of sex is the strongest. A poet wrote: "Lust, through some certain strainers well refined is gentle love, and charms all womankind." Not only womankind. A crudely handled appeal to sex disgusts all decent-minded people. Certain advertisements evidently presuppose that the reader is a sexual maniac. Pictures of semi-nude girls are given a large lump of the space in an announcement—for what reason? The subject of some of these advertisements is intended to appeal to both sexes. If any emotion is aroused in the mind of a female reader, it will most likely be one of disgust or pity for degeneracy.

Should the instigators of this type of advertisement care to use common sense, they can disabuse their minds of the belief that such crudity appeals to anything beyond the mind of the adolescent boy, by inviting opinion from the average open-minded man who is also a potential buyer. Whatever their personal opinion of themselves and of other men, they might be surprised—or feel insulted.

### **AVOID AMBIGUITY**

Ambiguity or false impression should be avoided. Pictures which are intended simply to illustrate a commodity should clearly make themselves understood. This might sound like unnecessary talk, but under certain conditions an illustration can convey an altogether different idea from that which it is supposed to put over. The following two examples will serve to illustrate the point. In a current Press advertisement, a line drawing is included which catches the eye before the heading. Several persons who were asked the plain question—without any additional prompting—as to what the picture represented, replied that it was a gramophone. They were under the wrong impression: the advertisement was—for stoves! second illustration was intended to show two ducks, such as can be seen, ready plucked, in any poulterer's shop. They were pictured in position on a counter, with their heads hanging downwards and with a rectangular ticket placed between them. The picture, reproduced in coarse half-tone, was small and the detail not very plain. Assisted by the bend of the necks over the edge of the counter, the impression given to several people was of a man in plus-fours, lying on his back and reading a book!

### THE CURIOSITY MOTIVE

Lastly, a little problem before passing on to our notes on the drafting of the layout. Advertisements may be seen which incorporate a striking illustration but a cryptic heading, the purport of the whole being wrapped in mystery. They depend for attraction on the curiosity of the reader. Is this inquisitiveness worth playing up to, or should we make sure and put over a direct message by means of additional careful display? In certain instances, if the whole message is not read, the advertisement might fail owing to the ambiguity of the idea presented. Imagine a forceful drawing of a clenched fist grasping a telephone receiver which is plainly and urgently offered to the observer. The caption reads: "DIAL '999'—Quickly!"

The urgency of the appeal might arouse curiosity, the idea might be looked upon as strong, but what does the whole thing convey? The reader can find out if he reads the copy, or carries his eye to the bottom of the advertisement where the name of the advertiser is set in comparatively small type. This is the point for consideration: is the idea fitted to *one* product or service? The main theme of the illustration suggests the Post Office telephone service, while the caption might call up visions of fire, burglars or accident besides thoughts of the handiness of the telephone in an emergency.

The principal suggestion is of the telephone. Fire and burglars can be mentally connected with insurance. Accident may also be connected with insurance, but at the same time, when considered with the dialled number, with hospitals and their ever ready ambulance service. Here are three different services which could be tied up in the advertisement as it stands. Shall we depend upon what we think to be attractiveness in our idea, and the curiosity of the reader, or add a word or two in display which will fix the service for which the advertisement is intended? Is it really so attractive? Is the method of presentation of what we might think a good idea, fully effective? Will it interest in spite of the vagueness of the first-time message? Or-in the case of insurance-would force be strengthened by adding the extra line of display and making the message in effect: "DIAL '999'—Quickly!" . . . but insure first? The addition certainly puts the uncomfortable outcome of a possibility before the prospect, to whom the idea might recommend itself as a cheaper policy than waiting for the event to happen. On balance, perhaps a full and revealing first-time message wins.



### "DIAL '999' Quickly!"

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What's it all about? Is curiousity-rousing alone sufficient? The points included in the sketch opposite—the grip of the hand on the telephone suggesting commanding strength, the business-meaning modern type with the word "quickly" set in italic, thus augmenting the impression of haste—could be worked up into an advertisement which would be quite strong in its first-time visual impression. But what of the real message? What does it strive to popularize or sell? Ask a friend who has not read the text to give an answer to the question. Curiosity may often be played upon, but in such cases a tale, a "funniosity," a paradox, an interest or maybe a question will most likely be involved. In this instance we have a "blind" command given without reason for its issue. There is no interesturge to continue reading and so to discover the answer to the riddle. We should be safer to include the "reason why" of the advertisement. As it stands it is really meaningless. A reader might guess at three subjects at least-1. "Dial '999' Quickly!"-but insure first! 2. "FIRE! Dial '999' Quickly!" 3. The ambulance service.

### CHAPTER XII

#### THE DRAFTING OF THE LAYOUT

Rules for the layout designer—Choosing type for men and women
—Long ascenders for grace—Sanserifs for sophisticated simplicity
—Display types—Script and cursive—Pencilling the job—
Paper for layouts—Detail paper as an aid to "seeing" pattern
—Layout of type display—Build up files of reference—Arrangement and placing of captions—Watch the inner shapes—Letter spacing

"Open Sesame" is the charm-phrase which opened a treasure cave, but in this hard world the wisest words can never take the place of direct application. Nevertheless, golden rules for the layout designer can be built on the initial letters of these two "magie" words.

### RULES FOR THE LAYOUT DESIGNER

Firstly, O for Observation. Search out good specimens of advertisements, note the method of obtaining effect, the type faces used in combination, the harmony, balance, unity, method of arriving at effective display and how the message has been "got over." Practice, which alone will bring efficiency. Enterprise, which will help in making the effort striking and avoid the danger of the designer sinking into a technical rut. Naturalness—be yourself and do not merely copy that which happens to be fashionable. It is another way of saying individuality or originality, but do not display "self" at the expense of the goods to be advertised.

Those four guiding words apply personally to the designer. The following six concern the material out of which the layout is to be built. S for Selection and E for Elimination, out of which should be developed S for Simplification. Simplicity in typography and layout is one of those things which is difficult of attainment. As the first step to unity, all irrelevant matter must be the first to go. Select the strongest material and eliminate the unnecessary. Parsley is pretty but the meat is the important part on the dish—slash out the frills. Neat,

orderly attractiveness and readability should be the aim and order. Accuracy in drafting, of course! The printer has to work from your plan and therefore, for your own sake as well as his, work carefully. Be sure that that display line will come in in the size intended, and work out spacing as near as possible to that actually required. Do not be satisfied with anything slipshod, but endeavour to train the eye to see the difference made by half a point. To some, this might seem like "drawing the long bow," but such delicate appreciation is quite possible of attainment, and such small adjustment can, at times, make a vast improvement when spacing between groups.

M for Method and also for Message. As a general rule, strive by means of illustration, caption and sub-headings to get a first-time message across to the best advantage. The method of doing this must be considered, but before commencing the actual layout design, dot down particulars of the various components in their correct order, from the point of view of logical selling talk. The other side of method applies to construction. Anything which has been worth while making has been built to a final plan which has been developed from a series of previous "conceptions." The inexperienced designer who sets about drafting a layout before having made his plan in the form of rough "visuals," is likely to find himself in similar position to an organ builder who sets out to instal an instrument without the aid of a "layout," only to find that the largest pipes are too long for the height of the hall. An artist makes a small "cartoon" before embarking upon the painting of a large picture, in order to be sure that the composition is good and to assist drawing and proportion when working on the larger piece. Layout design is no exception. The masses and lines should be mapped out on a smaller scale before the finished piece is attempted. Work on the actual job is thereby simplified and the maintenance of proportion is made easier.

Lastly, we come to E for Effect. As shown at the end of the last chapter, effect might be quite strong visually, but the direct and immediately decisive impression effect can, at the same time, be lacking in unity of purpose. The right kind of effect must incorporate the expression of the theme by every possible means, so that the idea might carry the full weight of impression to the mind of the prospect.

The foregoing might possibly require a little clarifying. Let us put it this way: a woman who plasters herself with an overdose of mascara and lipstick banks upon what she believes to be good visual effect, but loses sight of that which is really vastly more important—impression. Women and layouts show to best effect when that beauty or style which is natural to them is gently stressed or reinforced. The aim of the make-up expert is for effect which will enhance the "type": that of the layout artist or typographer, the type which will support the effect.

### CHOOSING TYPE FOR MEN AND WOMEN

Character rather than prettiness or visual effect for its own sake should decide the choice of type for a particular job—a face in character with the theme of the advertisement and the article to be advertised.

In a previous chapter, it was pointed out how type faces differ in character from one another. Some are light in weight, some medium, and others heavy. Some are almost fragile in appearance while others are strong, forceful and bold in design. Some are plain; others, while readable, are more fanciful in conception. "Modern" faces are very much "squared up" and severely businesslike in appearance when compared with the softer lines and looser design of "old face." Certain "transitional" faces carry some of the characteristics of both old face and modern. They are usually very readable and are suited to "plain talk" copy, where pleasant smartness is needed rather than atmosphere and sympathy with a particular theme.

Two considerations must be borne in mind when selecting the type for a layout: the appeal of the design in so far as it will help to express the feeling or intention, and its colour or "sparkle" when set in mass—to harmonize or contrast with the general colour of the illustration. The ancient German printers named their old, pointed, black type "Textura." From this, we get the word "text" as applied to body matter. It was given this name owing to its appearance as a texture when close set on a page. Types of modern times show differing textures, owing to

variation in the disposition of weight, variety in colour, together with size and shape of serifs. Some textures are flat and calm, while others show more "pattern" or "sparkle." For this reason, by the way, a modern face such as Bodoni, with its cutting sparkle, thrown out by heavy contrast of thick stems with thin hair-lines and serifs, should not be used on a shiny paper. The effect will be dazzling and hard to read. Although, when reading text matter, whole words are taken in at one time, we are to some extent unconsciously impressed by the form of the letters composing those words and by the "texture" over which our eyes are passing.

There are thousands of type faces on the market. Our aim must not be to collect a long list of names, but rather to narrow our range to a number of types which we really know and to give our keenest study to the best method of use. It is of little good our specifying a type if the printer does not carry it in stock. However, keep an eye open all the time for that "something extra good." Maybe it will be worth while to buy the fount—but be certain!

Study specimens of the types mentioned hereafter until they can be recognized on sight. In this way, a type sense will be developed which will become as much a part of the typographer as recognition of chords is to the trained musician. For a start, the old typographical motto, "If in doubt, use Caslon or Garamond," is very good advice. In their plain beauty, their gender is neuter. They are

14 pt. Garamond

### ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

14 pt. Caslon Old Face ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

readable faces which will quietly clothe an appeal to either sex. Used in conjunction with symmetrical balance, they

will help in a case where an impression of repose is sought, owing to the absence of strong scintillation in their texture.

Baskerville and Imprint are two widely used faces which are based on the Caslon design. Of a quiet and open texture, very readable, they are eminently suitable for clean, calm, matter-of-fact themes. Imprint carries slightly more colour than Baskerville.

14 pt. Baskerville

### ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

14 pt. Imprint (101)

## ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

When selecting type, it should be remembered that men prefer a face which is plain and firm in appearance while women like rather more delicacy or freedom in the design. The four faces mentioned, although sweet enough in curve and line to appeal to either sex, are nevertheless firm enough in their "stance" to satisfy the average male reader. They carry "dignity" which might be useful support to that certain type of appeal addressed to women.

Here are a few faces of a more "tender," irregular, or perhaps of "rounder" design. The colourful cosiness of Cloister Old Style, the round and flowing loveliness of Kennerley, and the dainty originality of Pastonchi—designed by an Italian poet—will each have their appeal to women. From this short list of fine text types, we must not omit the graceful Goudy Old Style with its flower-like curves, and the clean-cut, classical Centaur. Both, although very pleasing, are easy on the eyes.

14 pt. "Horley" Old Style

(In smaller sizes sometimes substituted for Goudy O.S.)

### ABCDEFGHIJKLMNOPQRSTUVWXYZ& abcdefghijklmnopqrstuvwxyz

Study them all thoroughly. Imagine yourself drawing them. To do it is better still. Endeavour to appreciate whatever you "read into" them and also to fix the impression they make upon your imagination. Compare them for weight, colour and effect of texture.

### LONG ASCENDERS FOR GRACE

In the previous chapter it was pointed out that vertical lines are capable of conveying an impression of slender grace. In the design of a type face, this is sometimes taken advantage of, in the form of long ascenders. The best known face in this particular mode of design is Nicholas Cochin. The upper case is a fine letter for display purposes—when used with body matter in harmony—but the lower case is exceedingly small, with the consequence that the ascenders are very long. Designed by an engraver to the old French Royal Court, this type is an aristocrat and, like the majority of its class, it requires a great deal of space in which to breathe. Given that space, and used in small quantities, it will shine in all its patrician dignity, but cramp it and its effect will be wholly lost.

Another type of the long ascender class, much lighter in weight but extremely dainty and somewhat unconventional—associated with fine jewellery and the exclusive modiste or milliner—is Bernhard Roman. This is really a lovely face and extremely useful for conveying an impression of beauty, daintiness or refinement, despite the fact that it is not quite so readable as the four "matter-of-facts" first mentioned.

If we wish to convey an impression of age, there is Poliphilus. A splendid copy of a fount nearly 450 years old, its rich colour will blend well with a wood engraving, an illustration executed in that style, or a good range of

14 pt. Poliphilus, with Blado Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZ& abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ&

abcdefghijklmnopqrstuvwxyz

strengths in pen drawings. Pabst is another archaic style of type, with a crumbling edge to its letters and carrying a smallish lower case with rather long ascenders. Hotspur is yet another.

Two useful old faces of good design are Monotype Plantin and the Plantin Old Style of Messrs. Stevens, Shanks. The first, cast in more than one weight, has fine, robust and well-distributed colour. It is useful for advertisements without heading, or for body matter which will hold together an announcement which is heavy at top and bottom. The second closely resembles Caslon Old Face in general design and besides being a good type for body

14 pt. Plantin-Roman and Italic

# ABCDEFGHIJKLMNOPQRSTUVWXYZ& abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXYZ& abcdefghijklmnopqrstuvwxyz

matter in circumstances as just described, it is useful for display when less contrast is needed than that afforded by the use of Caslon Heavy with Caslon Old Face.

Amongst modern faces the first to come to mind is Bodoni. Very mechanical in design, it gives the impression of the machine, the tailor-made, the precise everything-inits-place business efficiency. At one time, it was thought

14 pt. Light Bodoni—Roman and Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ& abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

to be ugly when compared with the less rigid old face, but right use and correct association can beautify many things. Search out some of the advertisements for Pond's Cream and Face Powder to see how his fat brother, Ultra Bodoni, can look quite dignified in a scheme of things, the theme of which is beauty. Here is an instance of the enterprise of the skilled typographer, which was an eye-opener to many when first introduced.

Tiemann, although similar to Bodoni at first blush, is rather softer in design, more irregular and tending towards the feminine. Scotch Roman is a fine readable face of masculine strength, which will work well with Bodoni Bold as display type. Goudy Modern will pay for study. Solid in weight and of pleasing sparkle, it carries a certain subtle and fascinating irregularity which is reminiscent of the old face design. Lastly, Perpetua—a beautiful "inscriptional" style of face, designed by the famous sculptor, artist and typographer, Eric Gill. Rather light in weight,

14 pt. Perpetua—Roman and Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZ& abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ& abcdefghijklmnopqrstuvwxyz

with long ascenders and descenders, it is dainty enough for a feminine appeal, yet of good readability, showing to fine advantage in booklet form.

### SANSERIFS FOR SOPHISTICATED SIMPLICITY

Character in handwriting is brought out, in the main, by means of the difference in formation and variation in conception of certain letters. Applied to type, this can be plainly seen in founts where the stroke composing the various letters is uniform in thickness, and which are devoid of serifs—hence their classification, "sanserif" faces. Of the up-to-date sanserif types, the best known are Gill Sans, Erbar and Cable. Gill is plain; really and simply a conventional roman in sanserif form. Erbar is slightly more decorative. Cable Medium is rather on the daintier side and more feminine in character.

Reference to advertisements using these types will show that the best effect has been attained when used for a layout suggestive of the modernistic. Modern buildings are severe and plain in line, without the little additions and

14 pt. Gill Sans

### ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

14 pt. Erbar Medium

### ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz& £1234567890

projections seen in the older style. They are "architectural sanserifs." From this parallel we can take a line on the most appropriate use of sanserif types. They are in their element when used in a layout suggestive of up-to-date "sophisticated simplicity." In order to show them off to the best advantage, sans faces should be given plenty of breathing room. When set "to fill the space," perhaps in a size too large to be in keeping with the other components and especially when without margins, text matter composed in this style of letter can look a disconnected sprawl.

Here then is a selection of roughly a score of types, put forward in an endeavour to illustrate what is meant by character and effect. There are strings of others, equally beautiful in their own way and which are often put to masterly use—Dolphin Old Style, the fairylike Locarno, Mazarin, Venezia, Wren; the "almost sanserif" Della Robbia or Westminster; Hushing for tiny type panels which must not be over-assertive, though clearly readable; Granjon Old Face, Packard, Bookman and Fournier.

From types of this class, text matter will be built which will assist in conveying, as the case might be, an impression of delicacy, business efficiency, age, the feminine, strength, the mechanical, exclusiveness, the dependable, durability and the dignity of establishment.

Where extra weight is required, the bold face, which can be obtained in most of the series mentioned, can be effectively used. Italic type is also part of each family in the majority of cases. When an italic face is not issued under the same name as the roman fount, it is best to ask advice, from the founder if necessary, about the italic most suitable. For instance, Blado is the matching italic for Poliphilus, Arrighi for Centaur.

### DISPLAY TYPES

We now come to the question of display types. What kind of display is needed—calm harmony or strong contrast? The first may be attained by using one face of type throughout, with or without its matching italics. The second can be brought about either by the use of one type family, using the light weight of the face for body matter and the bold for display lines, or by employing a second fount of different name for the caption and sub-headings. Should the latter course be chosen, care must be taken to ensure that the design of the second type is in sympathy with that of the body type. It will be found easier if we make our decision as to the selection of a second face bold type through comparison of the light faces of both series.

Let us now take a few of the more unconventional or decorative faces. First, the "hand-tooled" which, given a general description, are letters designed with a white line or highlight running through them. They are in strong contrast with the ordinary style of type, and for that reason should be used only in small quantities in order to

24 pt. Goudy Hand Tooled

### The Technique of Adverti

show them off to maximum effect. Narcissus and Dominus are two fine faces in this class which will mate well with many of the text types quoted earlier. A different colour effect is seen in Adastra, a fount with an italic slope, and also in Pharos which will be recognized as Nicholas Cochin Bold, but with a white line through the dead centre of the mainstroke.

For heavy display in small quantities there is Atrax, while for bold, rich and unusual effect—on no account to

be overdone—Maximilian is reminiscent of pageantry, flaunting banners and trumpet fanfare.

When a rather delicate caption is needed, when one wants to grey or subdue a heading, or maybe if an effect of stone-engraved lettering is aimed for, an "open" fount should be chosen. Caslon Old Face Open, Cochin Open, Plantin Old Style Open and Imprint Shadow are examples. Types such as these look their best when printed on a hard—not shiny—paper. Vesta and Rosart are sparkling letters in which the edge of the main black contiguous to the white line is serrated, giving the impression of tooling met with in wood engraving.

For use with the sanserif body types, apart from the bold face, there are several decorative variations. Gill Sans Shadow gives the impression of third dimensional depth. Other members of sans families are Gill Outline, Erbar Inline and Cable Shaded. For a heavier face, giving sparkle and contrast, there is Phosphor Bold, reminiscent of a neon sign, especially when printed in colour, while a shimmering electric spark effect is given by the use of Prisma, a type in which the letters are built up of thin parallel lines which follow the direction of the stroke.

The class of face known as "Egyptian"—which can best be described as formed on a sanserif base but with heavy slab serifs added, which are as thick as the main stems—is useful in the heavier weights as strong display lines for sanserif text. Memphis, Karnak, Luxor, Scarab, Beton and Rockwell are good examples of this style of type, which, in certain instances, may be obtained in the "open" design.

14 pt. Rockwell

# ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

For contrast in feeling compare Broadway, which may be classed as a heavy sans, with Gallia which is purely

24 pt. Gallia (American)

# THIS IS NEWS

decorative. Both could be used in small doses for an appeal to women, but while the first gives the impression of the "sophisticated simplicity" of chromium chairs and black glass, the latter, with its dainty curls and softer colouring, more readily calls to mind the age of crinolines and lace.

If not absolutely sure of ability to attain the correct feeling, turn to something more conventional, simple and readable.

What might be called a "rustic" touch is seen in the decorative sans, Ashley Crawford, Othello and Neuland, with their tooled variants Othello Shadow and Neuland Inline.

### SCRIPT AND CURSIVE

Lastly, a few letters of "hand-written" design. Holla is a brush-drawn cursive fount, hail-fellow-well-met in its irregularity of form. One could almost say that it has a streak of good-natured humour running through it.

24 pt. Holla

# The Technique of Advertising by J. S

Raleigh Cursive is similar although not quite so irregular, and its lower case is smaller in comparison with the capitals.

Compare these two with the cool, meticulous suavity seen in Palace Script, a very precise production in the straight up and down style known as "copperplate." The result should be an appreciation of the fact that form counts a good deal in feeling. One is informal and warm, the other strictly formal and consequently rather cold, although its line is beautiful. We are, of course, speaking from an advertising point of view. Such a refined, formal but yet beautiful script as this must be given its appropriate setting and be used for its correct purpose—the reproduction of fine handwriting.

Bernhard Cursive might be compared to the good and beautiful lady released from court restrictions. Its line is as beautiful as that of the Palace Script, but its manner is not so trammelled. With its long ascenders, the subtlety of its curves, its tender, homely roundness and lovely flow, it is a face full of beauty for use in a scheme of delicate theme, with particular reference to the cultured woman.

# 24 pt. Bernhard Cursive

# The Technique of Advertising by J. Fowle-

Another good letter in the calligraphic style, for an appeal to either sex, is Trafton Script. Although pendrawn, it possesses just that amount of irregularity, feeling

# 24 pt. Trafton Script

# The Technique of Advertising by J. Fowle

and character which make a face of this kind pleasing, attractive and interesting. It can be used in conjunction with a wide range of body types, its general colour falling in with old face, modern or sans.

# ALPHABETICAL LIST OF TYPES. QUOTED IN TEXT

The figure after the face name is the key to the type-founder or distributor. Monotype is represented by the figure 1, Linotype and Machinery is 2, Soldans Ltd. 3, Stephenson, Blake & Co. Ltd. 4, Stevens, Shanks & Co. 5, C. W. Shortt & Co. Ltd. 6, John Haddon & Co. 7.

Adastra				4	Centaur				1
Arrighi Italic				1	Cloister O.S.				1
Ashley Crawi	ord			1	Della Robbia				6
Atrax .				7	Dolphin O.S.				5
Baskerville				1	Dominus				4
Bernhard Ro	man	•		3	Erbar .				3
" Cu	rsive			3	" Inline				3
Beton .				3	Fournier				1
Blado Italic				1	Garamond				1
Bodoni .				1	Gallia .				1
Bookman				6	Gill Sans				l
Broadway		•		1	,, Shadov	V			1
Cable .	•	•		3	,, Outline	•			1
" Shade	d	•		3	Goudy O.S.			•	1
Caslon O.F.				4	Granjon O.F.				2
,, ,,	Open	•	•	4	Holla .		•		3

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When about to draft a layout, before putting pencil to paper, we must have a clean-cut idea of what we want; what to use and what to reject; what to do and what to avoid. From this will be realized why considerable space has been taken up by discussion of things that might be thought of as abstract in so far as they affect the actual making of the layout. These abstract points combine to form the skeleton upon which to shape our layout in "concrete" form. They help to ensure that our plan is good and our building sound.

The following short summary of the most important points dealt with is intended to assist remembering. Body type to suit theme and to match or contrast with the illustration. The why and how of display. Display types for contrast or effect. The use of white space. Composition, harmony, contrast, unity and balance. How atmosphere, suggestion, impression and movement may be put forward. Unusual treatment; light and shadow effects; focus on "difference" or special detail; symbolism. Irregularity of shape and strong display for small space. Avoidance of ambiguity or false impression. Desirability of first-time message. Impression more important than visual effect for its own sake. Last, but not least, simplicity in theme and construction.

Now take a sheet of paper and test the memory by writing down all that can be called to mind on the subject of the various headings, referring back only if necessary. In this way we more easily fix knowledge of the various points and thus enable ourselves, when studying the work

of other men, to develop ability for constructive criticism together with ideas of our own on the subject.

#### PENCILLING THE JOB

With a clear view in our mind as to what constitutes a good layout, we can now deal with the actual pencilling of the job. The first consideration which comes to mind is that of equipment, and the first piece of advice regarding this is that good pencils are a sound investment in the long run. The so-called cheap article, with soft wood of nondescript variety and friable lead, brings in its train many dips into the pocket for renewal, strings of curses over broken points and often a grittiness which is not conducive to good work. Three grades of "colour" will be found sufficient for the ordinary run of work. For general sketching, an H.B. gives a clear line, while the lead is not hard enough to damage the surface of the paper. For slightly heavier colour and the lighter display lines 2B, while 4B is a suitable weight for heavy captions and the blacker tones in illustration suggestions. A good yet inexpensive pencil for use in heavy work, and which suits the hand of many people, is Wolff's Black Prince-well worth a couple of pence for a trial.

Drawing-boards vary in quality and category, from the type used by engineers and draughtsmen, battened, unwarpable and expensive, down to a piece of five-ply. Suit the board to strength of pocket, but endeavour to come by one which is truly squared up. Half imperial size will do for the average work of the student, but full imperial offers a surface large enough for drafting a full-page newspaper advertisement.

A time-saving tool is a T-square, although it is possible to get along without it at a pinch. If buying, see that it is a good one. Throw-outs can sometimes be bought for a small sum, but they may not be in square. A handy and practical size is either 18 in. or 24 in.

A set-square, a foot-rule and a printer's type scale complete the drawing equipment. Regarding the latter, a handy tool is the steel scale made by Chesterman. It is 12 in. long and folds into three, which makes it convenient for carrying in the vest pocket. At certain times, even

when away from the actual job, it is useful to have a type scale near at hand. As an instance, for those who are not already good at spotting type sizes, it is a means of checking the correctness or otherwise of their "guesses."

Having amassed as near to a good working collection of type specimen books and sheets as fair words or polite writing will induce the various typefounders to part with, we have only to obtain a supply of paper and then get to work.

#### PAPER FOR LAYOUTS

Apart from Bristol board, fashion boards, poster papers and special papers like Whatman-such as used for finished art work—the papers which concern us most as layout designers are known as detail, transparent greaseproof, cartridge and bond. Detail paper, also known as graph paper, is overprinted with a network of lines which break up the surface into squares. It should be obtained in a ruling which gives twelve squares to the linear inch. Transparent greaseproof paper will be found quite satisfactory for the purpose of tracing, while it is far cheaper than the actual tracing paper. Cartridge paper varies in quality and weight; let it be of fair quality and not too thin. For small pen-drawn layouts, a good bond paper offers a fine hard surface at little cost. Penwork on cartridge is liable to spread and there is also a liability for the pen to pick and spit—a disadvantage which is obviated when a bond of fair quality is used. Of course, for finished penwork, Bristol board cannot be beaten.

Everybody knows that the expert starts with two extra items of equipment in the form of wide knowledge and facility, but the thinking student comes to appreciate the fact that the majority of experts—barring the very few possessed of heaven-endowed genius—commenced with similarly simple knowledge, to which they added by means of painstaking plodding, imagination, and much in the way of trial and error.

Careful grouping, correct spacing and due attention to "blank shapes" as part of the pattern, together form the bedrock of good typography. A fine business card, letterhead or title page looks clean and simple in its state of

completeness, but—much thought was needed to simplify the radio set! Any good printer or typographer will admit that the three pieces of print just mentioned can often present quite a problem, whereas the technical mutt will most likely express the opinion that they are "money for jam." The beginner—or enthusiast—will do well to have a go at turning out a few good cards and letter headings, (for self or friends in order to lend more interest), and also to study the construction of fine title pages with a view to producing a few of his own. Advice is cheap in the first place, but it sometimes brings good value later. The designing of such pieces is splendid training for the eye in the appreciation of value in mass and subtlety of spacing.

# DETAIL PAPER AN AID TO "SEEING" PATTERN

Detail paper is useful for experimenting with this and other classes of work. The squaring simplifies the plotting of the "blot" in geometric form, while it seems to help some eyes to "see pattern." Each square is an actual typographical unit—six points or two to pica—and each inch square represents six picas of measure or of depth. This can be taken advantage of when working full size on a business card, letterhead or title page, or the squares may be used as a basis of scale when roughing small visuals. For instance, when roughing out a draft for a larger advertisement, we decide to make our visual a quarter of the linear measurement of the actual space. Having made the "blot," we have in the visual drawn out on the squared paper, a certain amount of suggestion as to the dimensions of the various components, in this case each square representing two picas. Of course it is not absolutely necessary to make our visuals on this squared paper—in the majority of cases they will not be-but to some, the method will be found quite sound and helpful. After all, either way, detail paper or plain, the visual is but a means of forming an idea in elementary form of the general effect of group sizes, colour, spacing and white space. It is up to each of us to choose the technique which best suits his eve and hand. In any case, we are sure to find the necessity of making full use of brain and type scale when drafting the actual layout.

The practice usually adopted as a means of arriving at the best arrangement consists of drawing a number of suggestions on one sheet of paper, in order that they might be easily compared for effect. These visuals will be of the "poster stamp" variety, measuring about two inches at longest dimension. It pays in the long run to draw the small visual in scale with the size of the actual space. The average newspaper column is  $2\frac{1}{2}$  in. wide and therefore, for example, visuals for advertisements occupying 6 in. double column and 12 in. triple column could measure 2 in. by  $1\frac{1}{2}$  in. and 2 in. by  $1\frac{1}{3}$  in. respectively. The advantage of working to this small size is that the space is not only quickly covered, but that massing and spacing are more easily seen, owing to the area being so directly concentrated under the focus of the eyes.

Having drawn our little thumb-nail sketches, we consider them from all points of view and finally choose a particular example to suit the job. Unless we are very sure of our ability to put this directly into type, it will be best to develop the visual into a full-size layout in block form, the components being suggested by rectangles and other shapes in their varying weights. At this stage we can correct the placing of the components, moving them as needs be slightly up or down and to right or left, besides calculating the approximate space to be occupied by text, together with giving due attention to the general effect of spacing.

# LAYOUT OF TYPE DISPLAY

Satisfied with the skeleton sketch, we can now proceed with our layout showing type display. It will be appreciated that the style of layout for submitting to a client will be of a more finished character than one which is simply intended for the guidance of the compositor. Although, in the latter case, a faithful rendering of type faces is not so essential as in the former, neatness and accuracy should be put into both. The method of procedure adopted in drafting the finished layout varies with the likes of the individual. One designer will draw the top and bottom components first and then fill up in between, while another will find a straight work through from top to bottom the better method. With very small amounts of copy, the letter may

sometimes be pencilled in for the sake of effect, but in the usual way text will be shown by means of horizontal lines, drawn parallel and at such distance from one another as will suggest the colour of the body matter.

In order to develop technique, enterprise and freshness of ideas, the reconstruction of advertisements, booklets and other printed matter is recommended. Taken as they come -good, bad or indifferent-rearrange them in skeleton form and finally in full display. If not in agreement with the style of typography, substitute your own idea, perhaps reducing the weight or size of caption and increasing the size of body type or vice versa. Maybe, to your way of thinking, the type face employed does not fit the theme. or the whole layout is either too reposeful or too fidgetty. Pick out the weak points and strive to correct them in your reconstruction. Much is to be learned from mistakes, both our own and those of other people. Criticism, in certain instances, can be futile and nothing more than brazen cheek—unless we strive to do better—with pencil and pen not with tongue! Even when carrying out our reconstruction, it is possible that we might come up against an unforeseen snag, and one of which, by the time of our discovery, the designer of the original is already aware. Anyway, give him credit for having encountered the snag, but go one better and earn a pat on the back by trying to overcome it. That's the soundest and most useful type of criticism—constructive, therefore instructive.

Every layout designer cannot be a skilled graphic artist, but he should strive to train himself to make simple sketches—sufficient to suggest to the artist the style of thing which is needed in the finished illustration. It should be remembered that niggling detail and much "shading" are less important than good grouping of still objects or natural posing of figures.

# BUILD UP FILES OF REFERENCE

Memory drawing is difficult even to some skilled artists, who would far sooner depend on their files of "reference." Scan the illustrated books and newspapers, making a collection of likely poses or other material which might eventually prove useful. Storing them in a portfolio or

even in a home-made folder of brown paper, we gradually build up a good selection of "models"—heads displaying beauty or character, hands, feet, athletic action snaps, kiddies asleep or at play, costume pieces, animal studies, aeroplanes, cars and even attractive pieces of still life or landscape. As the collection grows, it is a good idea to index each section or even to keep it in a separate folder for easy reference. Practical and efficient commercial art calls for a considerable period of study, but sufficient aptitude for rough sketching, such as that under discussion, can eventually be possessed by the majority who will apply themselves to steady and concentrated spare-minute practice with pencil and paper. If after a fair and conscientious trial it is realized that one is absolutely unable to draw, simply specify the size of space which the illustration is to occupy and give the artist very clear and decided details as to what is required.

#### ARRANGEMENT AND PLACING OF CAPTIONS

Next for consideration is the arrangement and lettering of the caption. Psychological experiment shows that the human eye can, at one time, take in four simple objects or four words. It would therefore seem that the ideal caption should consist of no more than four words, but—clarity of idea must always come before brevity. Ease of comprehension of the idea presented is an equally important principle of attention, and therefore the really practical caption is one which fully expresses the idea in the least possible number of words.

Single line captions present no difficulties as far as grouping is concerned, but should a heading run to two or three lines, it must be correctly "phrased" in order that the sense of the whole be taken in at a glance. Once again—our reader is in a hurry, potentially not interested, and therefore the sense of the caption must be made to hit him at first shot.

Consider the statement: "Rich men are usually poor advocates of frugality." Using this as a caption, we could set it out in two lines thus—

Rich men are usually poor advocates of frugality.

The idea conveyed by the first line is a ridiculous self-contradiction, and the second line, which it is possible to read as a reason for the first statement (being advocates) is even then in direct opposition to known and logical fact. In this setting, the meaning is distorted and, at a quick glance, the idea is likely to appear near to ridiculous.

"Rich men are usually poor advocates" would not be a good first line, even if we had the space to accommodate the length. The power to advocate their own interests made them rich. The arrangement which not only conveys the full sense but introduces a certain amount of rhythmic

accent is-

Rich men are usually poor advocates of frugality.

A further illustration of how faulty phrasing can convey a false meaning and also leave part of the idea in mid-air is seen in the beautiful "Kashmiri Song," one of the "Indian Love Lyrics," which will be familiar to many readers. All too often, one hears a vocalist sing a particular stanza thus—

> Pale hands, pink tipped, like lotus buds that float— On those cool waters, where we used to dwell.

Phrased in this way, the first line is misleading. It is true that lotus buds usually float, and since we must, as it stands, take the first line as the full expression of an idea, what does the second line mean? To fully convey the meaning and sentiment of the lyric writer, the correct phrasing should be—

Pale hands, pink tipped, like lotus buds
That float on those cool waters
Where we used to dwell.

Maybe it will be agreed that the sense of the message and consequently the arrangement of the caption will depend upon the phrasing. It is perhaps a counsel of perfection, but there is every reason why we should apply it whenever possible, even at the expense of a little extra care.

In order to have a complete specification as to form and arrangement, there are still a few more points to consider. Weight or colour relative to illustration? If caption is of

two or more lines, shall it be leaded or set solid? All capitals, or upper and lower case? Accent, emphasis, or suggestion of movement by the use of italics? Will the heading gain colour or atmosphere by the use of "mixed" typography—incorporating plain types with words here and there in italic or decorative face?

The answer to all these questions lies with the individual taste of the designer. It might be mentioned that upper and lower case is more easily read than all-capital setting, but at the same time, in contrast with ordinary reading matter composed of upper and lower case, capitals can make a strong heading. Remember, however, that there is less natural white around an upper case line and therefore, lines of capitals should be leaded. A good general rule is that the amount of lead used should give a depth of white between the lines equal to the height of the upper case letter used. Accent or emphasis should not be overdone for reasons given previously, and the use of "mixed" typography should be approached very warily and thoughtfully.

"What size of type will fit the arrangement?" Reference to the type specimen book will decide. Turn up the face which is to be used and make a bold guess as to the likely size which will "come in" when set to the matter embodied in the longest line. Take a slip of paper and mark off the width occupied by letters and spaces in their turn, allowing the appropriate small space between the letters. The type will be the correct size for the job if the "mark off" is within, and somewhere near the length of the measure of the line.

Having found the type size, we now proceed to draft the caption. We can either try our hand at freehand lettering, drawing very light guide lines to indicate the depth of letters and inter-line spacing thereafter marking off the widths of the various letters and subsequently drawing them, or we can resort to tracing. Take a piece of grease-proof paper about an inch wider than the layout and deep enough to well cover the caption. On this, draw the guide lines and trace the caption in correct position, letter by letter. Convert the tracing into "duplicating paper" by blacking the back with a soft lead pencil. Guided by small

marks on the edge of the layout—indicating the ends of guide lines—place the tracing in correct position and follow the outline of the letters with an H.B. pencil, taking care to apply neither too heavy a pressure nor to disturb the position of the layout paper. The tracing completed, our caption will be ready for us to fill in to full weight.

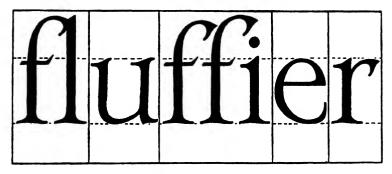
# WATCH THE INNER SHAPES

Using either method, do not work mechanically but take notice of the characteristics of each face dealt with. "Watch the inner shapes" is good advice when lettering freehand. Working in this manner, there is greater likelihood of the character of the face being faithfully rendered—a useful tip when working on finished layouts.

When drafting a caption, one should always bear in mind the limitations of type when compared with lettering which is drawn by hand. Good lettering should aim for an apparent equality of white space between letters. With this principle in view, consider the upper-case letters L, T, A, V, W, and Y. If any two of these occur in a particular word, the space between them will be much wider than "normal" or desirable when compared with the spacing between other letters. The lettering artist can overcome this by overlapping the horizontal portions of L and T when they occur together, or by making the extreme outer point of one letter encroach upon the "territory" or enclosing rectangle of the other—for instance, T and A or A and V.

This, of course, is not possible with type in its normal state and is a point to be remembered. If deemed necessary, as in the case of finer work, the difficulty can be overcome by means of mortising. This operation consists of cutting away a section of the body of each of the stamps, so that they interlock and consequently the outreaching extremities of the two letters overlap. In certain combinations of letters, there is no help for the state of affairs when dealing with type, and even the lettering artist can do very little. A word such as Waving might be regularized by means of mortising, but what can we do with an example such as Wyvern? Thank the laws of average and probability that they do not occur very often.

Glancing through a piece of printed matter, the reader will notice certain letters, part of which "naturally" overlap the territory of the letter next to them. The tail of upper-case Q of certain founts, the curves of lower-case f in roman and italic, and italic lower case y are examples. These are known as kerned letters and they are cast so



Two or three letters cast together on one body are known as logotypes. It will easily be appreciated that, in the case of the majority of founts, if a plain f of lower-case were set against another single unit f, l or i, the kern of the f would rest on an effective printing surface of the following letter, and not on its shoulder. One result would be that when pressure was applied the kern would snap off. In order to avoid this, combinations such as ff, fi, fl, ffi and ffl are cast as single stamps. In many founts it will be noticed that the cross-stroke of f joins up with the following letter, and the dot of i is lost in the kern of its preceding f.

that an overhanging part or kern is made to rest on the shoulder of the following letter or the one preceding it. In the instance of lower case f, this enables the vowels a, e, o and u to be brought up close enough to ensure good letter separation. Certain circumstances arise where this method of overlapping the kerns of single letters is not possible and therefore two or three letters are cast together. These combination letters ff, fi, fl, ffl and ffi are known as logotypes.

All these points should be borne in mind when drafting a caption consisting of upper and lower case. Lack of knowledge in a layout draughtsman is not conducive to

respect on the part of the compositor.

### LETTER SPACING

A few words on letter spacing. This, as its name implies, consists of placing space between letters for one reason or another. It can be used as a means of equalizing the normal spacing in a word, perhaps to drive out a caption which just fails to make the measure, or as is sometimes seen at the head or foot of an advertisement, in order to give a kind of "staccato" decorative effect by the use of wide letter spacing. In the usual way it is a practice not to be recommended, especially when dealing with lower case, and should be resorted to only in case of necessity or when absolutely sure that decorative effect is really worth while. Letter spacing calls for good craftsmanship, as the spacing will vary with the letter combinations—poorly whited letters requiring more than those that are rounded or open. It will be realized that if letter spacing is used, the consequent increase in the word spacing must be very carefully considered, otherwise the result will be illegibility. if not weakness and muddle.

A useful change from the postage-stamp size of visualization is practice in "working large." Just as the thumb-nail sketch is useful in giving easy control over the disposition of mass, so is this rough sketching on a bigger scale of great assistance in developing breadth of treatment, good handling of space and the appreciation of effective focus. The enthusiast should try his hand at evolving rapidly drawn layouts for small typographical posters, say Crown size 20 in. by 15 in., or for full-size advertisements for a newspaper page. Kitchen paper and ceiling lining paper, both of which are inexpensive, are quite good enough for this class of practice, and the work can be carried out in heavy black pencil, charcoal, conté crayon or soft litho chalk. If lucky enough to possess an easel, use it. If not, buy a piece of three ply, hang it upon the wall to convenient working height, pin your paper to it and have a go, viewing the result from a distance at frequent intervals.

#### CHAPTER XIII

## THE DRAFTING OF THE LAYOUT (CONTD.)

HANDBILLS as quick persuaders—Insets—The booklet—The dummy
—Margin allotment—Allotment by unit value—Pricking down—
Positioning headings and illustrations—Typography for booklet
and catalogue—Blotters and calendars—"Marking up" the
layout—Choice of initial—Decorated letters—Headpiece and
tailpiece

APART from Press advertisements in newspaper and magazine, there are various kinds of "literature" which the layout designer will be called upon to produce. The same principles of good typography apply to every kind of printing, and the designer's aim should always be for attractiveness, good arrangement and easy reading, be it Press advertisement, leaflet, circular, folder or booklet.

The leaflet is a single sheet of small size which is printed on one side only. A circular consists of two or more pages, a single sheet printed on both sides constituting a two-page circular. A folder can be described as a circular which is folded in a certain interesting or intriguing manner. The booklet needs no general description. The treatment of any one of these will depend on the type of goods with which it deals and the class of people to whom it is addressed, but do not treat the typography with too much class distinction. We are sometimes told that when addressing the educated class, the more refined and "artistic" type faces may be used to advantage. What is this class and in what special way do they display their culture or education? Is appreciation of all that is neat and orderly (we will not say "beautiful and artistic") to be regarded as practically the monopoly of this particular class?

# HANDBILLS AS QUICK PERSUADERS

The Cinderella of advertising "literature," dubbed urchin of the leaflet class, is the handbill—commonly known as a "screw-up" or a "throw-away." Why not try to make it a "gee-up," a "tuck-away" or even a

"quick persuader"? The usual get-up of these pieces invites slinging, owing to the outlook just mentioned that anything will do for broadcast distribution to the ordinary man in the street. Some people seem to go out of their way to make handbills as ugly and unattractive as possible, the type face used appearing to be the most sickening specimen which could be picked out of a sack in a back-alley print shop of the cock robin type. Steer a middle course. There are plenty of good types which will not make the proposition appear too "posh" for poor pockets, but while realizing that we should not try to ape top-hat and tails in such a setting, at least let us have clean, respectable and well-fitting overalls. Fine title settings are sometimes seen on the cinema screen. In the main, the cinema appeals to the masses. Are those fine pieces of "typography" intended only for the "educated" minority, or does the art director take the line that he is safe in using something pleasant to look upon, the audience having already paid?

This point, regarding the supposed lack of appreciation in the masses for good typography and art, bears thinking about. Many of the cinema posters are, sad to say, not nearly so good as the titles just mentioned. The reason usually put forward for this is that better work would not be appreciated. The masses throng the Underground stations and walk along the streets where they see many pieces of poster work—classed by advertising experts as excellent from the artistic and selling points of view. Same public but better posters! Are the designers of these wrong in judgment and outlook?

It might seem that I have shot off at a tangent, but the foregoing is just an invitation to thought on the questions: "Is better design worth while?" and—self asked—"Am I a member of the masses?" What I wish to put over is again in the form of a question—Is the "ordinary man" reading a handbill in the street, or perusing a circular at his desk or bench, so very different from the same man at home reading his newspaper—the man who, we are often told, is more readily attracted by well-designed Press advertisements? The attractive attracts—people. Conceit for "class" is more practical than class conceit.

#### INSETS

Apart from their use as a means of carrying a message to a hurrying public, leaflets and circulars may be used as insets in periodicals, for enclosure with correspondence, or as accompaniment to the product within its package. The character of design or display, and whether an illustration is to be used will, of course, depend on circumstances. For instance, a package enclosure could consist of a two-page circular, written with the idea of priming the enthusiasm of the reader in favour of the article about to be used. The first page could contain interesting particulars of the product, its efficiency in use, together with suggestion as to benefits which, in course of use, will automatically occur to the notice of the user. Page two might include an analytical report, backed up by a few short but convincing testimonials, together with a polite request for recommendation—the cheapest and most potent form of advertising. Paper which is to be printed on both sides should be thicker than that used for a leaflet, for which, in particular, a tinted stock might be considered. Due consideration must also be given to the method of reproduction if illustrations are to be used.

With the four-page circular, we come nearer to the booklet form. A usual and good arrangement is that in which the first page is immediately interesting by reason of an attractive design or curiosity rousing title, two wellbalanced centre pages accommodate the tale or selling talk, with or without supporting illustrations, and the fourth page is printed with the name of the goods, their trade mark, or a smart slogan with publicity value behind it. When placing this small mass, see that it falls in correct position somewhat above the centre, otherwise it will appear to be sliding down the page. On the other hand, do not fix it too high.

#### THE BOOKLET

The booklet has been described as the goods on trial in the abstract, a personal interview or a descriptive demonstration. The purpose of the press advertisement is to attract, to "make known," to interest, to bring conviction as far as possible in restricted space and to spur to action of one kind or another, which may take the form of an application for a booklet. The job of this booklet will not only be to attract but to form a strong and favourable impression, to amplify the Press story, to give further information, to dispel doubt by reinforcing belief, to work up enthusiasm, to force decision, and collectively, to bring about sales. Taking the broad view, the Press advertisement may be looked upon as the audience collector or skeleton programme, while the booklet is the actual "lecture" or "educational entertainment" arranged and produced for the edification of those who are somewhat more than casually interested.

When we come down to the job of design, the first question which arises is regarding the kind of booklet required. What is the class of goods? What are the tastes of likely readers? Under what circumstances will it be distributed? If of the "take one from the counter" type, keep it on the small side—the retailer values his counter space and will not be cluttered up with piles of large stuff. Apart from this, a customer will more readily take a piece which will fit the pocket, or at least which can be carried easily and inconspicuously.

If illustrations are to be used, can they be small or must they be large in order to be thoroughly effective? This brings us to the question of size. A booklet for a car or a house, including large and plainly detailed illustrations and most likely including a few diagrams—or plans and elevations—would, in the usual course of events, be larger in format than, for instance, a booklet of cooking recipes or one inviting interest in photography.

The class of booklet also decides the manner of treatment. The cheapest kind might have a cover made from the same paper as the rest of the booklet, the text matter commencing on the first right-hand page, while the highest class of work might include, apart from a special cover, a title page on folio three, faced by an appropriate frontispiece on page two, followed by a preface or introduction—the text commencing on page five. A booklet of average class would not include all of these components at one time, but it should be remembered that the title page and the

commencement of the text should always be situated on a right-hand folio.

The number of pages must be decided upon, which is considered convenient or sufficient for the subject and for which the requisite amount of copy will be written. In the case of existing copy, calculation will show the number of pages required when set in a suitable type size. A booklet cannot contain an odd number of pages. The figure must be a multiple of four, the range for ordinary use covering pieces of 8, 12, 16, 24, or 32 pages.

#### THE DUMMY

Having made up our mind about the general get-up, we pass on to the printer particulars of our requirements, asking him to submit with his quotation a "dummy" booklet, made up to exact size in the paper which it is proposed to use, and clothed in the intended cover paper. This will not only enable us to judge quality and appearance, but to gauge weight in order that the booklet will come within the prescribed postage toll. If over weight, we must decide either whether it is worth while to pay more postage, to cut down the number of pages, or choose a lighter stock. The cover should be slightly larger than the text pages, but do not overdo it, otherwise there is a danger of rucking and tearing. An eighth of an inch is a good average overlap.

The layout may be drafted on the printer's dummy but this is not absolutely necessary—in fact it might be found more satisfactory to work on a home-made dummy made up of bond paper or thin cartridge, especially if the proposed text paper is of a shiny nature. Use the proper stock for the cover if available, but failing this, ordinary stiff brown paper can be utilized.

When designing a four-page circular or booklet, we work to similar principles to those followed when constructing a newspaper advertisement. First impression counts. Interest must be aroused by an attractive and well-designed cover. The theme of the design should have some connection with the goods and should prepare the reader for the matter included in the inside pages. An idea should be formed by suggestion, by means of

symbol, or in the form of a "charade"—but one which is easily guessed.

An example or so will illustrate the general idea. The cover for a booklet on interior decoration could show a calm landscape surmounted by the arch of a rainbow. One word, "Harmony," would describe the scene depicted and also the aim of the subject matter. Bricks and mortar, in themselves, do not constitute a home; it is the comfort inside the house that counts. Evolving a booklet for furnishings, we could show on the cover a picture of a great castle, rearing high above a tiny cottage in the foreground. Here is great contrast to outward appearance, but, says our title, "Home is across the threshold."

Novelty and curiosity can be used in order to arouse interest. We might even break into rhyme. In this instance, the picture on our cover shows a neat little kitchen, made more homely with a cat on the mat and canary in cage, and with quite an ordinary-looking table placed under the window. The accompanying jingle rhyme, incomplete, is likely to arouse curiosity—

Here's a flat with a cat,
A canary that's a singer,
A kitchen with a gas stove,
But? . . . Where's the . .

The point is that the innocent-looking table is really a very efficient wringer as seen on its rest day. Who'd have thought it?

Coming to the body of the booklet, we must consider our layout from the point of view of the unity of the twin page and on the principle of the double opening. When designing the centre pages of a four-page circular, we might make a single design to spread across two pages, leaving very little in the way of outside margins, and depending upon the light reflected from the interior of the layout—similar to our looking through the gates of a park on to a brilliantly lighted vista beyond. A booklet, on the other hand, as its name tells us, is a small book, and it should be treated as such. Illumination will be imparted by margins surrounding the type panels, which must be so placed that each is in steady balance on its own page and forms a unity with

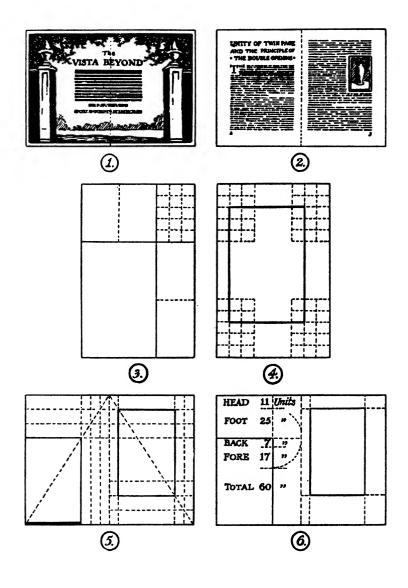
the other. The shape of the panel must also be in harmony with the shape of the page.

The margins are known respectively as head, foot, fore-edge and back-edge. The head should be smaller than the fore-edge and the fore-edge less than the foot, while the fore-edge margin should be equal to the width of the two back margins together. This will be recognized as symmetrical balance of two equal masses, as on one wide sheet of paper, optical balance being preserved by placing the masses up the page, and unity by furnishing equal white either side of each mass—the full back margin being common to both.

If over-wide back margins were used and the space between the masses were larger than the outer white, the double page would lose its unity and each mass would appear to be hugging its fore-edge margin. Another mistake is the outcome of a misplaced idea of the artistic. A page is given fore-edge and foot margins which are enormous-in two senses of the word-while the back margin is proportionately skimped. The result is a pair of type panels which seem to be snuggling together for warmth. The other extreme takes the form of margins which are the meanest possible, and where the type panel appears to be on the point of bursting. A good balance between the proportion of type area to surrounding white calls for a margin allotment which combines generosity superfluity, and common sense with good appearance.

# MARGIN ALLOTMENT

We will now deal with a few of the methods of arriving at margin allotment, but it should be remembered that every method is open to modification. The judgment of the designer should govern, and be guided by the requirements of the job in hand. In a particular job, the margins might, of necessity, be small, but for the love of passably good print, never skimp. We require a type panel which is in harmonious proportion with the size and shape of the page. We must decide on the proportion of each dimension for disposal as margin. Knowing the amount we have for disposal in each direction, we must then apportion an



There should be unity between two facing pages. This may be brought about by continuity of design across a double spread as in Fig. 1, or by means of harmoniously shaped type panels correctly placed—not only with regard to the single page but also the double opening—as in Fig. 2. This second diagram, drawn to scale, shows the page shape of Crown 4to. The margins are formed on the fraction principle for a solid setting, i.e. a quarter of each dimension for disposal as margins with allotment of two-fifths in head, three-fifths in tail, one-third in back and two-thirds in fore-edge. The shape of a Crown 8vo page is shown at Fig. 3. As a thin-leaded setting, onethird of each dimension has been marked off for disposal as margins. apportionment then being carried out according to the proportions described previously. The dotted lines and squares have, of course, been drawn on the diagrams in the interest of clarity. In actual practice it would be a matter of calculation and ruling up. The dimensions and placing of the type panel will, in cases such as the foregoing, be revealed through the planning of the margins. Reversing the process, we may fit margins around a panel of known size as in Fig. 5. To the left of this diagram is a thick horizontal line representing the proposed measure. In order to find the depth of type panel of similar proportions to the page, first a diagonal is drawn from the bottom left to the top right-hand corner of the page. A vertical line is now erected from the right-hand extremity of the measure line. At the point of intersection of this line and the diagonal is the depth of the type panel suited to the page when using the given measure. The differences in length and breadth between panel and page will be the measurements for disposal as margins. These may be split up according to the proportions already quoted or to any others which appear to suit. In this case, each of the dimensions for disposal has been divided into three. One division of width makes the back with two for fore-edge, and one of depth for head with two in the tail. This panel is "formed on the diagonal"—refer to text. Diagram 6 brings us to margin assignment by unit value. The single dimension for disposal in this instance is the difference between the sum of depth and width of panel and that of the page. Division is made on a fraction basis, the total number of units forming the denominator and each apportionment of units a numerator. Every margin in a set bears some relation to each of the others. Using this method it is up to us to settle upon an inter-relationship which gives the most pleasing effect. In this example the back and fore combined approximates the depth of the foot, while the total of back and head is something near the width of the fore-edge. Bearing in mind that the length of Crown 8vo is one and a half times its width, study of Diagram 5 will reveal that the unit proportions of back, head, fore and tail are 1, 11, 2 and 3. It will be realized that by using the unit method and employing 15 as denominator we may reach the same result—head half the foot and back half the fore—but choose the simplest method for any required result!

amount for each of the four margins, so that the type panel will sit in easy balance on the page.

Here is a formula which will be found a useful working

# basis—

### For disposal as margins

```
Type set solid . . . \frac{1}{4} each dimension , thin leaded . . . \frac{1}{8} , , , , , , , thick ,, . . . \frac{1}{12} , , , ,
```

### Apportionment

Head 3, Fore-edge 3
Tail 3, Back-edge 1

Supposing we have a Crown 8vo booklet to be set in solid type, let us see how it turns out. Reduced to ems, the measurement of the booklet page is 45 by 30. A quarter of each dimension for solid setting gives us  $11\frac{1}{4}$  ems length and  $7\frac{1}{2}$  ems width for disposal.

Duly apportioned, this gives us as margins—

```
Head . . . \frac{2}{5} of 11\frac{1}{4} ems = 4\frac{1}{2} ems
Tail . . . \frac{2}{5} , 11\frac{1}{4} ,, = 6\frac{3}{4} ,,
Fore-edge . . . \frac{2}{3} ,, 7\frac{1}{2} ,, = 5 ,,
Back-edge . . . \frac{1}{3} ,, 7\frac{1}{2} ,, = 2\frac{1}{2} ,,
```

It will be noticed that this gives a tail or foot margin which is  $1\frac{1}{2}$  times as large as the head. If we require a foot which is twice as large as the head, the fractions for apportionment will be  $\frac{1}{3}$  for the head and  $\frac{2}{3}$  in the tail. Another set of factors, based on the golden mean— $\frac{5}{5}$  type against  $\frac{3}{5}$  margins—will give us margins of the so-called "de luxe" type, in size somewhere between those produced by use of the figures quoted above for thin leaded and thick leaded settings. Three-eighths of each of the page dimensions gives us roughly 17 ems and 11 ems for disposal. Apportionment of  $\frac{3}{5}$  in head and  $\frac{5}{5}$  at tail gives  $6\frac{1}{5}$  ems and  $10\frac{3}{5}$  ems respectively, while fore-edge and back-edge allotted  $\frac{3}{5}$  and  $\frac{1}{3}$  will be  $7\frac{1}{3}$  ems and  $3\frac{2}{3}$  ems.

Maybe these fixed formulae do not give us exactly what we require. Perhaps we wish to work to a certain measure which would appear to give good results. What will be the depth of the type panel in such circumstance? This is just a repetition of the method for finding the unknown side of a printing block, as described in the chapter on

reproduction. Draw a rectangle the size of the page. Parallel to the left-hand edge and the width of the proposed measure away from it, erect a vertical line. Now draw a diagonal between bottom left and top right corners. From the bottom of the vertical line to the point where the diagonal cuts it will be the depth of the type panel.

Working the other way round, we might strike the idea of making the panel depth equal to the length of the short side of the paper. The effect of this can vary with the shape of the booklet, a Crown 8vo showing margins which are ample, while in the case of Crown 4to they are comparatively much smaller. It will easily be seen that variation in the proportions of the pages will bring this about.

This last method is a good basis for finding a suitable size of type panel. Construct a rectangle the size of the page and draw the diagonal as before. At the depth of the type panel, i.e. the width of the rectangle, above the bottom edge, draw a horizontal line. Measuring from the left-hand edge, the width of the panel can be read off at the point of intersection. How does the result suit for measure or depth? Whatever we add to, or subtract from the measure, the depth will come in proportion or vice versa. If, for instance, we think that a measure two ems wider will do the trick, add two ems to the measure on the experimental diagram and erect a perpendicular to find the new depth where it meets the diagonal. arrived at a suitable size for the panel, subtraction of each dimension of this type area from the corresponding one of the page will give the amounts of margin space at disposal.

When panel measurements are in exact proportion to those of the page, and the same fractions are used for each pair of margins—head and foot, fore-edge and back-edge—the type area will fall on the diagonal, i.e. a diagonal between the page corners will be common to both page and type panel. A little reflection will show that the fraction used for arriving at the head margin has the effect of fixing a common "optical centre" for mass and space, at a point which is that fractional amount of the length of the page below its top edge. Realization of such small matters will help when juggling with ideas of our own—if only in the way of instructional pastime.

#### ALLOTMENT BY UNIT VALUE

Besides the use of fixed fractions, another method of allotment is by unit value. Here, each margin is given a value of a certain number of units. Each of these units is taken as the numerator of a fraction, the denominator of which is found by addition of the four unit numbers. These fractions will be used to allot the *total* depth of space for disposal as margins. The total depth of margin space can be found either by taking a fractional part of the sum of both dimensions of the page, e.g.  $\frac{1}{4}$  for solid,  $\frac{1}{3}$  for thin leaded, etc., or, in the case of a type panel arrived at by other means, by subtracting the sum of the two sides of the panel from that of the two sides of the page.

The sequence of the unit numbers will coincide with back, head, fore-edge and tail. As a simple example, let us consider that the back is 1 unit, the head  $1\frac{1}{2}$ , fore-edge 2 and tail 3. The sum of these figures is  $7\frac{1}{2}$  and therefore the fractions will work out as follows: back-edge  $\frac{1}{15}$ , head  $\frac{3}{15}$ , fore-edge  $\frac{4}{15}$ , and tail  $\frac{6}{15}$ . In this case, the result is plain inter-proportion—the same as though we had disposed of two separate margin measurements by means of allotment

of 1 to back and head, and 2 to fore-edge and tail.

There are other combinations which give "interesting inequality." Back 3, head 5, fore 7, and tail 11 is a good one, but, on adding these figures together it will be seen that it means working to fractions with 26 as denominator. A combination giving very nearly the same result is 7, 11, 17, 25—giving a denominator of 60. This might be found easier to work with.

Advertisement design must be looked upon as either good or bad. Satisfaction with the mediocre is the first step to retrogression. In good booklet work, the margins are of the utmost importance. With pencil and paper, available ideas, the use of eye and the exercise of thought, much can be done and quite a lot can be learned.

The majority of booklets will be of the long or "portrait" shape. The disposition of margins for a "landscape" shape, in which the width is predominant, will be realized by turning a portrait page into the horizontal position. It will be seen that in the case of the landscape shape, the

fore-edge is the largest margin, followed in size by the foot, back-edge and head. In other words, the back-edge of the portrait shape becomes the head of the landscape, the foot becomes the fore-edge, the fore-edge the foot and the head becomes the back. As in the case of all panel placing, let a good eye spot the road to a pleasing result.

### PRICKING DOWN

Having decided upon the size of the type area and the proportion of margins, the next move is to mark the position of the panels on the pages of our dummy. To the uninitiated, this would seem to mean a lot of work, measuring up and drawing separate rectangles on each page, but actually only one page need be measured up.

Opening the dummy at its centre spread where the double page takes the form of a wide, continuous sheet, mark out the type panel on one of the pages, making sure that the corners meet clean and sharp. Let us suppose it is the right-hand page. With a thin, sharp point—a handy tool is a needle set deep in a bakelite-capped cork—prick the four corners through the pages to the back of the booklet. Turning the page, repeat the process by pricking through the holes to the front of the dummy. The construction of the rectangle in its correct position on each page is now only a matter of joining the tiny holes by means of thin or dotted lines.

One or two points must be borne in mind when about to commence this pricking down. For the sake of appearance, shield the cover, and any plain page or fly leaf, by means of a sheet of thin card, placing between them and the pages to be pierced. Accuracy pays: hold the point dead upright and prick each corner true. Piercing at several angles will mean an irregular shaped panel, an irregularity which will be progressively magnified towards the front and back of a large booklet.

Opinions differ as to whether a title page facing a blank folio should be treated as an ordinary page, with a small back margin, or whether the two vertical margins should be equal. There are arguments in favour of either mode. The printed double page is an entity, but, at the same time, a title page facing a blank sheet can be looked upon as a unit standing alone and balanced on its own page. On the other hand, "show-through" might be evident for some reason or other. This is not pleasing at the best of times, but it can make itself still more irksome when the pages are not backed in register. Anyway, if there is to be a departure from the general margin standard when dealing with the title or other single page, take care to shield it before pricking.

After the panels are marked out, further procedure will depend upon the job and to some extent the individual preference. Technique or order of working does not matter as much as the good quality of the final result, however arrived at. One can adopt a fixed order of working, but the chances are that it might have to be altered or modified according to the circumstances of the job, e.g. the position of sub-heads in relation to blocks; neither must cramp or foul the other. Let us rather consider what has to be done before we have a completed layout. The likely fall of the components will then dictate the mode of procedure—page by page construction, or in the case of simple text and blocks, maybe illustrations first.

Proofs of illustrations should, in any case, be pasted in the dummy so that they will be in position as near as possible to the matter with which they are connected. When this is done, the space to be occupied by the accompanying caption should be indicated, and the extent of white lines or margins drawn in lightly.

# POSITIONING HEADINGS AND ILLUSTRATIONS

The headings and sub-headings will be the only type matter in the body of the booklet which need be displayed in full lettering. When drawing, due attention will be given at the same time to interline spacing and the drafting of lines to indicate the depth of white lines—lines showing the area limit of preceding or following text matter. The treatment of these headings offers scope to individual taste regarding contrast, readability and strength of effect, including the use of italics in sub-headings, or in the case of wide margins, the employment of marginal headings. These latter will be placed in the fore-edge margin, set perhaps in two, three or four lines. The usual way of

setting these is to square up the inner ends of the lines parallel with the text, but there is no reason why the designer should not try the effect of centring the small mass in symmetrical balance in the margin. In any case, marginal headings should be plain, neat and readable, care being taken that they do not look simply a daub on the page.

We now have our dummy with illustrations in position, main and sub-headings drawn in, together with lines indicating the depth of spacing and whiting around blocks with their accompanying captions—the confines of the type area. Between these boundaries we proceed to draw the series of horizontal lines which are to suggest the colour of the text matter. When ruling these text lines, the sheet of thin card should be placed under the folio, in order to prevent impression carrying through to the page underneath.

Our layout will be completed with the filling in of the folio numbers. The indication of the folio or page number should first occur where the actual text commences. In the case of a booklet as previously described, with frontispiece on page 2, title on 3, and preface on 4, the first indicated folio would be page 5. In bookwork, it will be noticed that folios preceding the text are normally indicated by the appropriate roman figure. In such instance, the first five pages of the booklet quoted would be folioed I, II, III, IV, and 5. With a booklet of normal size, work to this mode but omit the roman figures.

There are various positions in which the folios may be placed. In bookwork they are often set in alignment with the running headline and squared up with the fore-edge of the type panel. With the likelihood of headings spreading to the full measure, this is not always practicable in the case of a booklet. The folio can, however, be set in the fore-edge margin in alignment with the head of the panel. Again, this might not work out too well when marginal headings are also used. The usual position for the folio in booklets is in the foot margin, either centred on the panel or squared with its outside edge. In the case of panels constructed on the diagonal, we might even try the effect of careful placing of the folio on this diagonal—on the "mitre" where fore-edge and foot margins join.

Instead of using arabic figures, folios are sometimes put into words, e.g. Page Five—set in roman or italic, small capitals or upper and lower case, sometimes letter-spaced. Figures or spelling, it is a matter of which best suits the job. The end is, after all, a means of reference for the reader in regard to the text. Our means to that end must simply aim for readily seen plainness without obtrusiveness. The rest is trimmings.

### TYPOGRAPHY FOR BOOKLET AND CATALOGUE

What is the difference between a booklet and a small catalogue? The first usually deals with one special item of merchandise and strives to persuade the reader to select the particular make of article from a wide range of competing lines. By means of suggestive, descriptive and explanatory copy, it endeavours to lead the thoughts of the prospect away from "counter attractions" produced by other manufacturers. The job of the catalogue, on the other hand, is to assist choice from the stock of one manufacturer, factor or store. In some instances, the dividing line is very faint, e.g., booklets featuring radio receivers— "convincing" tale, specification, with illustrations of various models in the range and full particulars of prices and terms. Price must be given at some time, and in most instances there is every reason why it should be mentioned in the booklet, but when a range of articles is illustrated, together with specification and prices-apart from the informative and persuasive story—the booklet tends rather towards the catalogue.

A reason for this mode of treatment may best be appreciated by considering the nature of the article to be dealt with. Is its specification standardized, and likely to be so for some time to come, or will it be open to modification or alteration due to progress or fashion? In the case of the wireless receiver, the next Radiolympia Show will bring a new range of models. The booklet-catalogue must sell the instrument "on the spot." With the coming of a new model, the previous one will be as good as obsolete—also the catalogue. The life of such a catalogue can be made merry, while it lasts, by the use of up-to-the-minute display faces, which, skilfully used, can help stress the "last word" effect.

Certain "smart" type faces are, however, liable to go out of "fashion" and therefore, while they are useful for the catalogue with the butterfly life, there is a danger of their dating a piece of more permanent nature.

For a catalogue which might be expected to last for a long period and which really constitutes a work of reference, a selection from the old and tried type faces should form the bedrock of its typography. Whatever the type of catalogue, it should not simulate a fifth-rate museum, dotted with tags devoid of imagination and with "Silence" shouted everywhere, but each of its captions should be the concentrated quick-fire thoughts of a super guide and ace salesman—interest, imagination, information, enthusiasm, lucidity, completeness, suggestive persuasion and friendly, natural manner. As in all layout, the designer should adopt Simplicity as his watchword and aim to give adequate "window space" to each of the items illustrated.

Whatever the kind of printed matter, it must be designed to fulfil its mission. That statement might seem an empty generality, but one has only to look around in order to discover many instances where this has obviously been forgotten. Window strips and window bills may be seen which have been designed "on the desk"—without realization of the necessity that, in order to be effective, they must be easily readable from a distance of several feet from the shop window in which they are to be displayed.

On the other hand, good examples will just as readily come to light. Book pieces known as house organs are published by many large undertakings in order to nurture "pride of firm" among employees, and also to court the goodwill and co-operation of clients. They are magazines, and as such must depend on interest for their popularity. Apart from the copy, which would perhaps include trade news, sports club reports, jokes, competitions, and even a serial story, the layout must be clean, attractive, readable and inviting. A good cover design is essential. This can be put out to a professional artist, or be made the subject of a prize competition for the sketch club section of the firm. Variation of setting in the body pages will sometimes help attractiveness. Trade news and jokes might be set in double column, while other items such as serial and club

reports might be set to full measure. Attractive headings in contrasting type will help the suggestion of variety of interest. Good specimens of this class of work are "Standard News" of Standard Telephones and Cables, "Lyons Mail" of the famous catering firm, and "The Ibis Magazine" published by the Prudential Assurance Company.

### **BLOTTERS AND CALENDARS**

Blotters and calendars come in their thousands. Some are taken, and the others severely dumped! When about to turn out one of these pieces, the designer should ask himself, "In the position of a recipient, what would I do with it?" A wall calendar must be plainly readable from a distance but never be an eyesore. A desk calendar which is cumbersome or top-heavy will, on a certain day of stress and frayed temper, assuredly be assisted by more than the force of gravity into the waste paper basket. In order to satisfy its full expectation of life, your calendar or blotter must either be more useful or of greater attraction than the others in the queue. How is it to be done? That's what every designer is asking himself.

Thus advertising print can broadly be divided into two groups—the short-message setting and the booklet form. One other piece of "message" print is the mailing card, which, as its name implies, is a postcard of rather large size. The width of the average letterbox is the limit.

The layout treatment of a mailing card will vary with the type of message and the people to whom it is addressed. It might, for instance, call attention to an article which is possibly of particular interest to certain members of the general public named in a special mailing list, or its mission might be to inform retailers and factors of the opening of an advertising campaign, at the same time soliciting their co-operation and pressing for their immediate action in obtaining adequate supplies of the commodity proposed to be advertised.

What is the nature of the goods? Who are the prospects? What are the circumstances? What is the main message? Plain sales talk with strong display might be called for. A rapidly "scribbled" crayon heading might help stress the note of urgency. Prominence of trade mark might be

appropriate. Symbolism might be used. Emphasis of an important date might be the theme, or the main message could take the form of a special offer in return for swift action.

With so much depending upon circumstances, no fixed rules can be laid down regarding design. While cards for the trade will carry an air of smart business through their simple plainness, those intended for a group of private individuals might, in certain instance, be designed along the lines of the greeting card but in every case, smart, uncrowded and interesting attractiveness must be the aim.

# "MARKING UP" THE LAYOUT

With all our careful plotting of mass and space, the only thing we have accomplished is to indicate the sites to be occupied by the various components. With illustrations pasted in and headings drafted, the result is capable of conveying to a client a good idea of how the printed piece will look, but before our compositor's layout can become the equivalent of a blue print or working drawing, it must pass through one more stage—"marking up" or specification of detail. Instructions should be marked in ink or pencil of a contrasting colour—say red or green—and should deal with matters which the layout does not convey.

What type faces are to be used for text matter and display? Specification should be plainly written against the lines or panels concerned. Instructions regarding text words to be emphasized by means of italics, small capitals or capitals will be marked on the copy in the manner described in the paragraph entitled "Proof reader's correction marks." Having previously made sure that the headings will "come in," we can also specify the size of type with its name, e.g.—Cloister Bold 24-pt., the leader in front pointing to the line concerned. With the same self-assurance, born of satisfaction with the accuracy of our working, we can specify the name and size of the text type, together with instructions regarding leading, if any.

How is the copy to be distributed over the setting? This information will be furnished by marking the centre of each paragraph, separate panel or caption with a distinguishing letter, a corresponding letter being marked

against the section of copy which is to occupy that particular space. To make certainty doubly sure, the first word or two of each paragraph or panel is sometimes lettered in full.

All copy should be carefully typewritten. If all on one sheet, either double-space between paragraphs or bracket each separate section, placing the distinguishing letter outside and close to the bracket. Whatever method is adopted in setting out the copy, clarity should be the first aim.

Rule work will be specified by means of description, in similar manner as for type. When dealing with a decorative border, we can either quote the founder's reference number or paste a small section in position on the layout.

Always endeavour to send the full quota of illustration blocks when forwarding copy and layout. Should a hold-up occur, due to our own faulty organization—or any other cause—we can save our printer the job of sending out a search party by writing "Block to follow" or words to that effect in the space on the layout which the illustration is to occupy. Knowing the position, the compositor can then fire away with the setting, temporarily filling the space with quads, which can easily be replaced by the block immediately it comes to hand.

Sometimes an initial letter can be used as a combined eye-leader, simple decoration and reliever of monotony. Successful use will depend upon correct setting—the outcome of appreciation of what is required of initials in general, and knowledge of individual treatment.

This form of decoration is a survival of a component included in the ancient scribe-written work. When manuscript gave way to print, the craftsman, when setting the text type and wishing to retain the characteristic initial, left a blank rectangle where the embellishment was to occur. The space was then filled in by the artist illuminator. Even in cases where no better effect was achieved, the general feeling was one of "belonging"—a matching of tone and a knitting together of initial and text into one type panel.

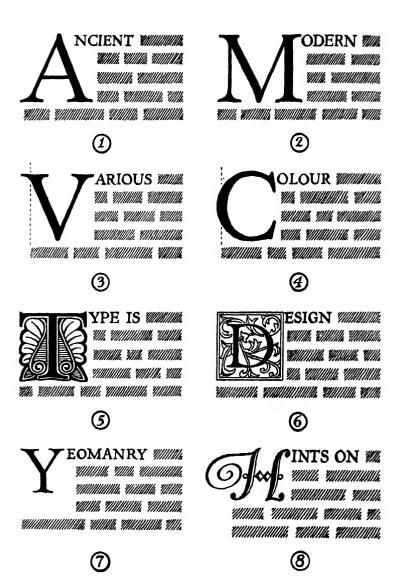
That is what we need and must aim for in our own efforts. Remember that the initial is part of the first word of the

text. It must therefore "connect" cleanly, closely and directly. In other words, although the large letter must connect into the text, it must be slightly separated from the other lines of the body matter. Separation must, however, only be sufficient to show where it mostly belongs and not enough to convey the impression of a feather in a vacuum or a single case of infection in quarantine. This separation or "indentation" will occur naturally in the case of certain letters. With others, the slight separation of the second and subsequent "covered" lines from the initial will be brought about by means of spaces or a lead placed vertically. So much for that—initial and text must appear as one. As a general rule, we can think of the whiting to the right of the initial as being equal to that between the base of the letter and the first line running to full measure. In view of what will be said later, it will be seen that this may vary with the depth of leading used in the text.

#### CHOICE OF INITIAL

We now come to the choice of initial. Whatever the choice, the colour must match the text—neither too heavy nor too light. To help the sense of "belonging," the first word of the text—and even the whole of the first line, will be set in capitals. The style of initial mostly used for ordinary advertisement work is a larger size of the face employed for the text. In order to avoid an unsightly gap at the base of the initial—"descender space" of the ordinary letter—we must use a titling or full-face character.

Having decided on the number of lines to be covered, be it two, three or four, we then choose a size in which the height of the face is equal to the depth of the requisite number of lines, solid or leaded as the case might be. The top of the letter must range with the upper serifs of the first line, and its base with the body line of the last covered line—not with the extremity of the descenders. With this method of aligning the base of the letter, we are given a depth of white under it which measures from the base of one line to the top of the short lower case letters of the following full measure line. The deeper the leading, the deeper of course will be this white, which will be balanced by a process of indentation when the letter itself does not carry



Placing of initial letters. A well-chosen and properly set initial should link immediately with the remainder of "its own word," situate in the first of the lines which it is set to cover. Subsequent lines should be set close to the initial, but not near enough to make linking-up and "making words" a possibility.

When an ordinary type character is used, the summit of a drop initial should be level with the upper serifs of the first line of text. Its lower serifs, or its base point, should align with those of the final covered line—never with the descenders of that line.

(1) Where the summit of the letter moves away from the first line, mortising is necessary in order to make connection sufficiently close. In this case, second and third lines are naturally spaced, but fourth line will connect if set flush. To overcome this, indent a middle space. (2) A straight-up square letter. First line set flush and subsequent lines indented. (3) This is a reversal of initial A. The bottom of the letter moves away from the text. Set all four lines flush—owing to fully effective white space, only the first line will connect. Used as a raised initial, the bottom of V, T, Y and suchlike base-whited letters must be mortised. A further refinement in the case of "diagonal" letters is the marginal placing of the serif (4) Rounded letters should be set with a small segment marginal. With this C there is plenty of white space, but will it allow of flush setting for all the lines? With certain designs of C the fourth line would be liable to connect. A safe rule is to indent where there is likelihood of linking with lines other than the first. (5) A squared and decorative unitial, the special design of which permits it to be correctly aligned. When dealing with square initials, the first line of text should be aligned with the extreme upper edge of the initial design. It is therefore better if this happens to be the summit of the incorporated letter. For all square initials, set first line flush and indent subsequent lines. A middle space is a good average, but this might be slightly increased in case of leading of considerable weight. (6) The common style of square initial, faulty from a typographical point of view. Simply an odd-sized letter dropped into a box of trimmings. It does not align with anything and does not "belong" anywhere. Use a plain titling letter in preference to such as this! (7) The only thing right about this is the upper alignment. Instead of a titling face, an ordinary letter has been employed of a point size to cover four body depths of text. The consequence is an unnecessarily large whiting under the letter, due to "descender space." To make matters worse, the subsequent lines have been heavily indented. They should be set flush because the bottom of the letter, moving away from the text, is already adequately separated by natural whiting. (8) Flourishes and loops of decorative letters should overhang into the margin. Only that portion of the initial which is sensed as the "real" letter should be accommodated in the type panel. Indent following lines if there should seem to be danger of a false connexion.

effective white space. In the usual way, say in a solid setting, a middle space will be adequate, but it might have to be increased in the case of considerable leading. Stick to a middle space in *most* instances and never exceed an en.

Square letters such as H or M, with their straight righthand stroke, call for the indentation of the second and subsequent lines in their depth. On the other hand, the letters F, P, T, V, W and Y are normally whited, and therefore require no further separation. The text lines abutting them will be set flush.

It has been pointed out that the first line of the text should be set as near to the initial as possible when it is intended to connect. Due allowance will naturally be made in the case of A as the indefinite article and I in use as the personal pronoun. In this instance, imagine A-or Lused as an initial which is to connect, and set in the normal manner, flush body to body. The result will be reminiscent of a train with a broken coupling. In the case of either of these letters, mortising of the top right corner is called for, sufficient to connect with the first line. Subsequent lines will be indented according to circumstances, but never too much. Mortising should also be resorted to in the case of F, P, T, V, W and Y when any of these letters is used as a large raised initial, i.e., when its base serif is made to range with the body line of a heading or the first line of a mass of text.

Here are two of the finer points when dealing with initials composed of ordinary type. The edge of the text should line with the outside edge of the left stroke of full-based letters and not with the left-hand point of the serif. In order to overcome the optical illusion of having been moved inwards, the diagonal letters W, V, Y and the curved characters C, O and Q should be placed so that a slight segment overlaps into the margin.

Decorative letters are sometimes used as initials. These include "swash" capitals, which are italic with flourish embellishments, and also calligraphic characters carrying highly florid loops and whirls. In the case of the simpler type of swash initial, which is capable of being squared up as a complete letter without cutting out any of the frills, it will most likely be possible to treat it in similar manner

to an ordinary roman letter. In the instance of a character bedecked with a large preliminary flourish, which would automatically be cut out in the process of squaring up the really "necessary" part of the letter, only that part which is sensed as the "real" letter will be included in the text panel, the flourish overlapping into the margin. A good eye and a patiently developed sense of fitness are the finest guides in such instances.

#### DECORATED LETTERS

We have so far dealt with the use of ordinary type characters as initials. Now for a few words on the treatment of decorated letters which are initial letters in their own right—especially designed for the purpose. We should rather think of such as pieces of decoration with letters incorporated, and make our choice on the sanest placing of the letter. If the decorative ground be square, whether with a free lace-like edge or enclosed in a rule, the serifs of the first word should range with the top of the border. The most satisfactory initials of the square type are those in which the summit of the letter either cuts into the top edge of the decoration or approaches it as near as possible. Such as these connect quite well, but in a badly designed character where the letter is placed low, the actual initial is isolated, connection does not exist and the resulting page becomes a thing of ugliness and a pain for ever.

When dealing with a square initial, the second and subsequent lines will be indented from a middle space to an en according to the space showing underneath the design, which, as mentioned before, will vary with the depth of leading.

Initials may be had in which the background is of free design, e.g. the letter surmounting a curving sheaf of conventional flowers and foliage, or an irregular mass of vine leaves and tendrils.

The correct treatment for this style is to align the summit of the *letter* with the serifs of the first line of the text. Some of these require great care to ensure their correct incorporation. The space beneath should be kept small, the amount of indentation must be carefully watched, and in cases where the design is likely to invite awkward gaps, the text lines should be made to follow the contour of the background by means of extension and reduction.

### HEADPIECE AND TAILPIECE

While discussing embellishments, mention might be made of two others sometimes used in booklet work—headpiece and tailpiece. As its name suggests, the tailpiece is a decorative motif to be used for the purpose of giving a sense of completeness to the last page, in an instance where the text does not occupy the whole of the panel space. Care should be taken in placing. Centred on the panel, it must not be too near or too far away from the last line—it must "belong." As in the case of an ornament on a title page, the process of shifting it up and down will assist decision as to its correct position.

In bookwork, the commencement of the text and the beginning of subsequent chapters is situated down the page. This is known as a "drop head" and is sometimes employed in booklet work, especially if the last page is likely to run to a few lines only. In such instance, a few more lines are carried over to the last page, which may or may not be finished off with a tailpiece. It is now a matter of choice whether we leave the drop white or employ a headpiece.

This may take the form of a rectangular mass of decoration which will run to the full measure, or an arrangement of scrolls balanced on the vertical centre of the panel, e.g. Bernhard Cursive Ornaments, which may also be used as tailpieces if in harmony with type—as all ornament should be. Whatever manner of headpiece be used, it should be placed with its top edge to the upper limit of the type area thus suggesting completion of the panel and bringing it into harmony with the page area with regard to shape and relative dimensions.

Following in the footsteps of the ancient illuminators, we might desire to make such embellishment the subject for a spot of enlivening colour. The question is one to be settled by the individual designer working on a particular job. Will the job bear the extra cost? Above all, will the cost be justified by a considerable addition to attractional effect or selling strength?

#### CHAPTER XIV

#### COLOUR AS AN AID TO ATTRACTION AND INTEREST

DIRECT photography or graphic art?—Colour to impart atmosphere
—When colour is profitable—Colour reactions—Symbolism of
colour—Effect and impression—Colour theories explained—
Hue, tint and shade—Intensity and luminosity—Tonal value—
Use of pure colour—Red the advertising colour—Colour problems
in advertising—Colour in typography—Choice of colours—
Tinted stock—Letter headings—A short summary—Colour
circles—The Ostwald system—The twenty-four colour circle—
Stepping the circle—Toned colours—Making the single-hued
chart—Dominant harmony—Value of the neutral scale—A
summary—Choosing the colour scheme—Advantages of the
Ostwald system—Equipment

COLOUR must be something more than a method of enhancing the attractiveness of the printed piece, or a means of pleasant contrast with black and white. It must help to "tell"; to make real; to call up associations; to strengthen the pulling power of advertising—to sell more goods.

Attraction is only the first step where colour is concerned. It must also interest and even be a method of appeal to senses other than sight through appreciation and imagination. Through association it may be made to assist in the expression of a theme—coolness, cleanliness, freshness, warmth, light, quality, richness, refinement, daintiness, happiness or youth.

Îmagine a "black and white" fire. It is cheerless, cold and static—ashes. Give it warm yellows, oranges, reds and even intermingled touches of blues and purples. It immediately becomes a thing of warmth, light, comfort and vivid movement.

Foodstuffs pictured in black and white have not the strength of appeal of the same products shown in colour. A monochrome fruit pie suggests in shape only something to be eaten, but give it a nicely browned crust with a section cut away to expose the fruit, and we help the beholder to imagine the appetising smell of baking pastry and the sweet fragrance of the warm cooked fruit. Imagery of the sense of taste might possibly also be aroused—the

"nuttiness" of the browned crust and the sharp, acidsweetness of plum, rhubarb or currant juice, conjured up by the suggestion of its red-purple lusciousness. Consider a green salad pictured in black and white. Visually it is cold—it lacks life. Given its fresh green colour it becomes instead suggestively cool, just as the black and white fire gains light, warmth and cheerfulness by the application of red, yellow and orange.

### DIRECT PHOTOGRAPHY OR GRAPHIC ART?

In such instances, colour is part of the appeal and may be used to realize the subject—to bring it nearer to life. For pure realism in result, photographic reproduction direct from the subject will be employed. When the subject is to be idealized, the graphic artist may be put to work. He will present us with the most appetizing salads imaginable, including lovely green lettuce without the slightest suspicion of the sere and yellow, ideally non-bilious eggs, edibly purple beetroot and super-National-Mark tomatoes, beautifully round, firm, shiny and succulent. His colours will suggest life, freshness and cleanliness when dealing with food products. Greens which are fresh and "crisp"not tending towards verdigris or bilious yellow. Clean and cool blues which are nevertheless lively—the reflection of a clear sky in a crystal pool. Browns which are warm and "toasted" and yellow tints in which the cream may be tasted. If, when painting a bottle of tomato ketchup, he coloured the "contents" true to life, the result would, most likely, not appear as appetizing and fresh-looking as it might. In such case the artist will liven the picture with colouring which has more red than the original, bringing the impression nearer the clean, inviting and ideally ripe hue of the tomato itself.

# COLOUR TO IMPART ATMOSPHERE

Apart from pure illustration, colour may be used to impart that which might be called happiness and atmosphere; to encourage a certain frame of mind and to render the feeling of a setting more adequately. On a grey and sunless day—in its "black and white" guise—a landscape, though beautifully composed, can appear

uninviting. If we part the clouds and warm them up, show a blue sky peeping through in all its calm and serene delicacy, picture the bright dappled effects of yellow sunshine and let full colour be revealed by the additional light, the result will be Nature at her best—warm, kind and friendly. Such a picture will arouse desire to be amongst such loveliness—the beauty of decided colour, harmonious and yet contrasting.

In the case of interiors, colour is the only adequate means of revealing the beauty of a scheme of decoration, the warmth and cosiness of a blazing fire or the brilliance of a lighting effect. Good colour is capable of stirring the imagination far more than monochrome, even though the latter be equally fine as far as draughtsmanship is concerned. Wearing apparel, drapings and upholstery can be depicted in black and white as far as design is concerned, but effect cannot be fully presented without the use of colour. This will be appreciated by calling to mind a certain competition in which a number of dresses are to be placed in order of merit. Many such things depend almost solely on colour for effect.

## -WHEN COLOUR IS PROFITABLE

From the foregoing we take a lead regarding the profitable use of colour. When it is, to a large extent, part and parcel of the product—where beauty of colouring is a strong selling point and an attraction in itself—the conclusion is obvious. In monochrome, as by night, even a peacock is grey, while sackcloth is sometimes flattered. Colour will show more thoroughly what a commodity is actually like and help to do full justice to products which depend wholly or partly for desirability on their appearance. Apart from clothing, cretonnes and furniture coverings, such things as carpets, linoleums, fine pottery, decoration, coloured craftwork and even motor cars may be included in this group.

There are other commodities, few in number, which are to be judged on what they will do—the effect or result they are capable of producing. Paints, distempers, floor stains and home dyes are, to many members of the public, merely colouring concoctions in tins or bottles. These people

are possessed of very meagre power of visualizing a finished result—on the beauty of which such things greatly depend—and therefore, for instance, the pulling power of a paint booklet might be strengthened by the presentation of one or two attractive schemes of decoration in full colour. Remember that when colour is involved in the product itself, colour is the only really satisfactory means of illustration—and description. Hue, tint and shade cannot adequately be described in words. Garden seeds and bulbs are advertised only as a means to an end. It is the result—blossom—which is illustrated and eulogized. Words cannot do this really and thoroughly.

We can also ask ourself if colour is likely to earn its existence as a reinforcement of sense appeal by means of association or symbol, by idealizing the subject or making it appear more real. Will it add to the pulling power of a theme of refreshment, happiness, cleanliness, coolness, comfort and cosy warmth, or make the subject of the picture still *more* "mouth watering"?

### COLOUR REACTIONS

When dealing with colour we must consider personal preference, individual associations and variety of reaction. One person will view a colour simply as a colour, which will please or displease according to individual like or dislike. The standard of judgment of another will be based on association, the colour reminding the viewer of a certain thing. Yet another will feel the colour in terms of temperament or character—smiling, candid, forceful, brooding; the modest violet or the arrogant poppy. In the case where mental or bodily "feeling" is affected, colours will be judged by their heating or cooling propensities and by their enlivening, stimulating, sedative, cheering or depressing character.

# SYMBOLISM OF COLOUR

When reproducing a product in its natural colours by means of photography, we have little to worry us. Nature, if she be in pleasing guise, will be taken as she comes. It is when we set out to produce colour schemes for impression that we commence to watch our step, if we intend to produce something which is not contradictory to the theme. The emblematic qualities of the "purer" colours suggest certain attributes to the majority of people. Red, the most stimulating of all, suggests fire, heat and strength. Yellow, when bright and pure, light, life and gaiety. Blue is emblematic of coolness, quietness and dignity by association with the broad dome of heaven. Orange, a mixture of red and yellow, combines the characteristics of both—a colour of warmth, movement and brightness. Green recalls verdant Nature; life and peace; the green pastures of soothing happiness. "Born in the purple" is the tag associated with wealth and kingship.

This is simply a very broad outline of the emblematic significance of the primary and secondary hues considered from the point of view of what is really, in most instances, plain association. It will not require a great deal of imagination to realize that many more meanings can be read into the various colours, especially by means of suggestion, when they are incorporated in a design. symbolic figure of gas, coal or electricity may be of ruddy aspect, but the red garb of Mephistopheles characterizes the embodiment of evil. Red on a dagger suggests crime, but on a cheek, health, and on an apple, tempting ripeness. The wicked Mephisto is confounded by the red cross of St. George, the symbol of sacrifice and chivalry. Yellow may be "light to shine upon the face." That yellow will be bright and healthful. Yellow of a different hue will show the face of a man ridden with disease. Purple robes may denote wealth and royalty, but hands tinged with purple may tell of poverty, perishing coldness or malnutrition. Certain of the instances just quoted are examples of the use of what might be called suggestive or even "descriptive" colour.

Although red is used as the symbol of heat, it would seem to be heat of the unrelenting type allied with power—the sullen glow of Vulcan's forge. It is purposeful for its own ends, consuming rather than comforting—Inferno; volcano; the intense and eternal pressing forward of industrial production. For a more cheery, comforting and yet lively "heat," a well-balanced orange suggests itself. In order to appreciate this, light up the gas fire. When the radiants

are fully heated, there is a warm orange glow which is reinforced by contrast with the blue cones which project from the mouths of the jets. Now turn the fire out and notice how, as it loses its yellow and turns to a glowing red, it becomes sombre and sullen by comparison—even miserable. While the first is a kind and cheering warmth, the second is brooding and reminiscent of smouldering anger.

### EFFECT AND IMPRESSION

Whatever the line along which we intend to work, the main consideration when using colour in advertising is effect and impression. Blue is broadly described as signifying coldness and sedateness, but an electric blue—light in tone and rather greenish—can be extremely vital or equally deathly according to the method and circumstances of employment. As concentrated light in the form of a lightning fork, especially when backed by a colour in dark shade, it is capable of conveying an impression of vivid light, active life and possibly immense speed. In the form of diffused and general lighting over a scene or other composition, it can appear ethereal and deathly.

A particular single colour, as a colour, may symbolize, suggest or be associated with several things, but such symbolism, suggestion or association will be of a particular and definite kind only when the colour is used in circumstances where its significance is understood. For instance, red may be thought of as the emblem of fire, evil, chivalry and self-sacrifice, but it will carry a particular significance only when "characterized"—put into a form in which it can express that special emblem, e.g. Mephistopheles or Devil Friction—or connected to a particular theme through printed word or words, such as "Fire—your enemy!" or "Gas—the Slave of Industry!" In these last instances, the colour amplifies the word, while the word justifies the colour.

# COLOUR THEORIES EXPLAINED

We have spoken a good deal about colours named yellow, orange, red, purple, blue and green. This has been good enough for general description, but every person who is

not colour-blind knows that any particular colour can vary in vividness, richness, purity, lightness and darkness, besides what might be called "definition." Before we proceed any further, it will be as well to know how this variety is brought about. There are several theories of colour. The one most commonly known adopts yellow, red and blue as the "primary" colours in pigments, by the admixture of which—theoretically—any other colour may be produced.

Light is the source of all colour, sunlight when analysed by means of a glass prism showing six main colours yellow, orange, red, violet, blue and green-colours of the spectrum. By mixing red and yellow, orange is obtained; blue and yellow gives green, while blue and red produces violet or purple. Yellow, red and blue cannot be made by mixing the other colours of the spectrum and therefore they are looked upon as the primary colours. The colours orange, green and purple, resulting from a half and half mixture of the primaries, are known as "secondaries." A further set of colours called "intermediates" comes to light when some more of one or other of the primary colours forming part of a certain secondary is added to that particular secondary. Thus the complete commencing range of primaries, secondaries, and intermediates includes yellow, yellow-orange, orange, red-orange, red, red-purple, purple, blue-purple, blue, blue-green, green and yellowgreen.

# HUE, TINT AND SHADE

Actual dominating colour effect is known as *Hue*. Thus, although a colour may be dark or light, strong and obvious or elusively near to neutral, the hue is not altered but only modified. The hue may be red, blue, green or any other of the colours, and the mere fact of its being say light red, dark red or "not quite so red" does not alter the fact that its hue is red.

In this instance, think of all the colours as being squeezed out of pigment tubes. As they emerge from the tube, they are in their most concentrated and unadulterated form—pure or "saturated" colour. Now let us see how we may modify them. One method is by lighting or shading—by

altering the tone of the pure colour. Whatever pure colour we place upon paper, we can think of it as being at "normal tone." The normal or natural tone of the different colours will vary. Yellow is of high normal tone, while blue is low, the one being nearer to white and the other to black. Above and below the normal tone of a colour are its tints and shades. Tints are obtained by adding white, shades by the addition of black. Thus pink is a tint of red, while brown may be a shade of the same colour or of orange. Graduation of tint or shade will depend of course upon the amount of white or black which is added. In many cases, perhaps not entirely due to prejudice, the commercial artist will not use black for such a purpose, relying instead on the addition of complementary colour, i.e. colour which is necessary to complete or balance the red, yellow, blue colour triad. Thus, according to the "three-primaries" mode, blue is the complementary of orange, red of green, yellow of purple—and vice versa. The effect of adding the complementary is to neutralize the colour to which it is added. As an illustration, if an artist required a brown and did not wish to use a ready-made pigment nor to employ black, he would most likely obtain it by mixing a deep orange which he would turn to brown by the addition of blue. The three primaries, when mixed in certain proportion, produce a dark grey which could be passed for black, and therefore the artist uses black even though it be in indirect manner.

At this juncture it will be best to hasten slowly. None of us has difficulty in appreciating what is meant by a pure or saturated colour. It is the densest "solution" of the particular hue which can be placed on paper—spectrum colour in its fullest body and undiluted. Tint is the same hue moving towards light, while shade is its movement away from it. Theoretically, its eventual fate in either direction is complete neutralization, the colour losing strength of original hue increasingly as it ascends or descends.

With only three graduations either side of the normal tone, we can have a range which includes light tint, medium tint, dark tint; pure colour; light shade, medium shade and dark shade. Seven variations of the twelve original

hues gives us eighty-four colours. A further wide range is offered in the way of "greyed colours" which may be looked upon as "sharps and flats" of the high tint to low shade scale. Commencing with our pure colour and adding a certain amount of white, dark tint was the result. Light shade was obtained by adding a certain quota of black to the pure colour. For the sake of clarity and understanding. let us just presume that the requisite amount of white and black raised and lowered the normal tone in equal degree. Also that these amounts of white and black, when mixed. give a grey of the same tonal value as the saturated colour. In that case, if we add the grey to the colour, the result will be neither a raising nor a lowering of tone, but simply a "breaking" or greying of the original hue. As with the simple tint and shade, the greater the amount of added grey, the weaker the hue strength. With sufficient grey added, neutralization will take place—the original hue will become non-existent as far as the human eye is concerned. What if the proportion of black and white is altered to a far greater degree? White raises the tone while black lowers it. If a great deal more white than black is contained in the added grey, the resultant tone value will be higher than that of the pure colour. It will be raised to a high tint by the white, which tint will be lowered to a certain degree by the black, resulting in a "shaded tint." On the other hand, when black is predominant, the result is a shade, but one which contains white—a "tint of a shade."

### INTENSITY AND LUMINOSITY

When a colour is pure, saturated or unadulterated, it is said to be at its greatest *Intensity*. This intensity—of hue—will be weakened when white, black or grey is added. Thus, intensity is dependent upon the hue content of a colour between the limits of full saturation and complete neutralization. In other words, the degree of intensity is judged by the amount a colour has been deprived of its full redness, blueness or other definite hue. For instance, the green associated with sage is not so intense as leaf green, Wedgewood blue as cobalt, light red or Venetian red as geranium lake or vermilion. The intensity of a hue may also be reduced by the addition of its complementary colour.

The Luminosity of a colour should not be confounded with its intensity. Luminosity in a colour is its power to reflect light. White reflects infinitely more light than black, and therefore colours which tend towards white will be more luminous than those with an inclination to black. From this it will be appreciated that pure hues will vary in their normal luminosity, yellow being followed in order of degree by orange, green, red, purple and blue. The luminosity of a colour may be raised by the addition of white, while it will be lowered when black is added.

Luminosity and intensity should be considered when choosing colours singly or for use in combination. The most luminous electric light becomes as nothing in a sunlit room, and a black cat simply merges with the black skin rug upon which it reclines. Similarly, a colour of too high a degree of luminosity will be difficult to see against an equally light background, while a dark colour will be just as ineffective against a paper which is equal to it in tone value. It is a matter of the correct or most desirable contrast between colour and background and colour with colour. When two colours, greatly varying in degree of luminosity, are brought together, the darkness of the one tends to give an impression of still greater brightness in the other. Wide difference in brightness between two colours means strong contrast. When this contrast is too wide, there is a tendency for the lighter colour to appear weak and insipid. This should be watched, particularly in the case of designs which are to be viewed from a distance. One other point deals with intensity. We have seen that luminosity must be included to a good degree, either in the design itself or in the background, and that visibility calls for a correct balance in contrast. Light tints tend to merge with a light background, while dark shades, when viewed from a distance, will give the impression of fusing with one another. For posters and similar "long distance" designs it has been found that dark tints have much greater carrying power than saturated colours. Lighter tints have their place in other spheres, and if delicacy be required in the treatment of a poster, the effect of greyed colours of middle to dark tint tonal value might profitably be tried out.

#### TONAL VALUE

The tonal value—lightness or darkness—of a colour can have an effect of its own. Delicacy, spring, youth, lightness and freshness are characterized by tints of soft pink, tender green, innocent blue, dainty lilac and mauve and delicate vet colourful peach. All these can be particularly attractive when slightly greyed. High in tone, like the upper notes of the piano, they are fairy-like. They are the colours of many of the spring flowers. They enhance the sweet and dainty delicacy of the infant wardrobe. They are the basis of colour schemes intended to appeal to feminine taste. Light is life; these tints carry additional light. They invite the beholder to dance and be happy with them, whereas deeper tones are more sober, stolid, static and even sombre. Their song, although high-pitched, is exceedingly sweet-the song of the sprite could never be associated with "a dark brown voice." A fit of the "blues" could never take on the hue of a blue from this upper range. Yet another transformation takes place when we add white -or "light"-to the regal purple and the sullen violet. The result includes pleasing tints of lilac, mauve, heliotrope, and the sweet-simple lavender associated with the little old Victorian lady and the old English garden.

### USE OF PURE COLOUR

Pure or saturated colour should be used only in small patches. Larger areas may be used of light tint, dark shade or colours which are neutralized. Contrast between pure colours is stronger than that between hues which have been lightened, shaded or greyed in equal manner or extent. We can now form some idea as to how we may fit colour tone to our theme. Tints suggest a strong lighting—the happy sunshine effect of the open air. They are delicate, youthful, fragrant and springlike. Shades are the strong men. They can be forceful or equally retiring, depending upon the manner of their employment. Imagine a tower standing in all its great dark strength against the light of the sky. There you have one of the uses of shades. In the reverse way they may be used as a foil to give value to concentrated light, just as the forest shade enhances a

stray sunbeam breaking through dense foliage. Deep purples can be depressing, but they may also be made to

suggest richness and an air of mystery.

Shade in itself may also be depressing, but it may so be used as to be the mainstay of a theme of comfort, peace, contentment, soft light and cosy warmth. The bright glow of a firelight and the steady beam of a shaded lamp are made more telling and inviting by the mysterious "quietness" of the encircling shadows. Apart from pure illustration, this can also be applied to design. This last instance also illustrates another principle. Colours which are warm should appear in smaller quantities than those which are cold. Generally speaking, a warm colour has a large content of yellow or red, alone or in combination, while a cold colour is one which is either greatly neutralized or else contains a dominating proportion of blue.

### RED THE ADVERTISING COLOUR.

It is dangerous to generalize on the selection of particular colours for certain themes, and to lay down that a certain colour only should be used while another should be left severely alone. A product is to be sold. That product might carry colour associations, but it is not the product alone which must be considered, but most likely its category among other similar products, together with the idea behind the selling scheme. Red is the colour most widely used in advertising. It represents vim and vigour, as does orange to a lesser degree. Used in large masses, it is therefore not the colour for themes of rest and quietness. Nevertheless, a picture of a sunset carrying a good deal of red can be quite restful. In such a case it would seem that the theme thought is stronger than the plain effect of a single colour. Brown in its "rich and nutty" state might be used in an advertisement for coffee, cocoa or wholemeal bread, as it reflects the rich natural colour of the product. Red used in conjunction with the brown would stress the sustaining or stimulating qualities.

# COLOUR PROBLEMS IN ADVERTISING

Should red ever be used in the advertising of a "cool" subject? Again, it depends upon circumstances. In their

main spheres of activity, no two things would seem to be further separated than gas and refrigerators. In the usual way of thinking, red should be taboo for a refrigerator, blue being a colour which suggests itself as suitable. Refrigerators are, however, of two main kinds—gas and electric—and blue is simply the colour for such products in general. How then should a gas refrigerator be presented in colour? An answer to this has been seen in the form of a poster, in which the product is backed by a cool, clean, light blue, while the "adjective"—Gas—is shown in red and yellow. Thus we are impressed with the importance of obtaining a product of a certain specified kind, through the medium of an adjective of kind or category which has a colour association of its own. All blue, or blue with any other colour than red, would not be so definite. Emphasis and impression of a most important point would be lacking—refrigerators and gas to come in future as one inseparable twin thought.

Another instance of the "colour adjective" is seen in a poster for Argentine Chilled Beef. The illustration depicts a fine "joint" which has every appearance of being a potentially first class roast. The job of this poster is, however, not simply to sell beef-which might be homekilled, frozen or chilled, and the product of any country. In order to be effective, that poster must lead the housewife to buy not simply beef, nor chilled beef, but Argentine Chilled Beef. An attempt to put over the adjective "chilled" takes the form of two or three irregular brush strokes, making up an isolated patch of cold blue, on which background the words "Argentine Chilled Beef" are set. The message, to be fully expressive, consists of three words. An attempt has been made to impress two of them, but "Argentine" is left solely to the memory without any extra aid to additional impression.

Here is an instance where colour is incapable of impressing description and illustrates the difficulty which can be experienced at times in putting a message across to the fullest extent. The subject of this advertisement is particularly interesting. At the present time, Argentine and chilled beef are closely linked in the public mind—they are almost synonymous terms. What if this were not so, and

it was really necessary to stress the country of origin. How then could the matter be handled? Would realism, used to the fullest extent be absolutely necessary? Argentine is associated in many minds as the land of the tango, therefore the inclusion of a "character" might help—in similar manner to the inseparable Gas and Mister Therm. Symbolism might be possible while still giving pride of place to the succulent joint. Being an everyday line, a catchphrase might well be considered—straight, humorous, or even parody. As example of the latter, the following comes to mind and is put forward with all due acknowledgment to a lady renowned in song—"My Darling Clementine"—

Beef that's tender, full of flavour?
Ask for "Chilled"—and "Argentine"!

These latter remarks are included simply with the idea of showing the difficulties encountered in certain circumstances when evolving posters and other printed matter intended to promote sales, also that the proviso "if" can sometimes offer something further to think about.

# COLOUR IN TYPOGRAPHY

While considering the evolution, uses and possibilities of single colours, we might as well deal with the employment of colour in typography. The first principle to bear in mind regarding this deals with the amount that should be used. Like the Welshman's cow, it should be little and good. In plain typography, it is the small amount of contrasting type which brings the strongest and finest effects. Treat the use of colour in like manner—as contrasting and decorative type.

# CHOICE OF COLOURS

Regarding the choice of colours. Red, blue and bluepurple are to be preferred in the general way to green and orange. Red has come to be looked upon as the standard colour for this class of work. This is not only due to the fact that it is a survival of rubrication as seen in old manuscripts and books, but that its hue and tone value is such as to make the maximum contrast with black type, commensurate with its ability to ensure readability and unity.

Red, when used as a companion to black, should be of an orange tinge, such as seen in vermilion. A red tending towards crimson lake may appear dowdy and sulky. When choosing other colours, fix their value somewhere around that of such a red. The reason for this is readily apparent. If the tonal value of the chosen colour is too near black. we may just as well save the money. If the value be too high, the second colour will simply recede and not only be difficult to read, but will upset the balance of the whole layout. Colour in any case, and in the most vivid case red—is weaker than the black type with which it appears. Thus, if we require a certain degree of emphasis, a line printed in colour must be set in a larger face or bolder type than if it were to be printed in black. As a general rule, use bold face of the size which would give the requisite emphasis in black when set in light face, or double the body size if set in light face. Apart from red, choice should go to colours which, while holding their own with black, are neither garish, crude nor startling. One could do worse than turn attention to some of the greyed or neutralized hues-olive greens, tint-shades of turquoise and other blues, slightly greved orange, sienna and umber browns of suitable value and even the right weight of blue-purple.

Although light tints should never be used for display purposes, it is possible to employ them when the border is the sole decoration. If so used, the design of the border must be sufficiently weighty, otherwise the result will be too weak to crawl out of the page. Weight of type and weight of block design should always be watched in relation to tonal value of colour, otherwise the effect is likely to be "colour—once upon a time"; a faded ghost. There is the other side, of course. A design of the filigree or tracery type, drawn in fine line, will look quite well when printed in a colour of normal tone. Owing to the strong interplay of white, it will appear as a lighter tone against the heavier mass of display type which is printed in the same colour.

Adverting to typographical layout, we recall that to spot and emphasize single words by means of differing weight was to ruin the unity and harmony of the setting. This also applies to the use of a second colour. Take a case which is often seen, in which the first letters only of certain

displayed words are printed in colour. Is this practice even sensible? Viewed from the standpoint of contrast or emphasis, what is the object in applying it to single letters? Far from emphasizing anything apart from the bad taste of the designer, the result is nothing more or less than the semi-robbery of a letter from each unfortunate word so treated. If colour is to be used, use it in whole lines, small masses or groups, but never for single letters or isolated words in the mass of black text—with the exception of initial letters.

### TINTED STOCK

The cheapest method of introducing colour into printed matter is through the use of tinted stock. Quite good results are possible if we choose wisely, humouring the tint of the paper when working out a colour scheme. We must remember in the first place that we are about to overprint one colour with another, therefore the effect may be quite different from that resulting from the printing of the same colour on white. The difference in body between poster colour and printing ink should be borne in mind. The printed colour, consisting of a much thinner film and being far more transparent, will allow a strong background to come smiling through at us, with the result that the printed surface hue will not be that of the ink but a mixture of the printed colour and the background.

The choice of the designer may lie in two directions. When evolving his colour scheme, he may either choose a background which is likely to help the most and interfere the least, or capitalize on a background which is to be an aid to a certain effect, thereafter playing upon the result of the "overprinting." Points of view differ, as also the behaviour of different pigments, but in an instance such as the latter, the effect of ordinary water-colours might be tried on the paper which is proposed to be used.

Creams, fawns and buffs are useful tints. They possess the advantage of being neutral to all intents and purposes, and have not sufficient intensity of hue to "argue" with the printed colour to an uncomfortable degree. They provide a quiet and yet effective backing for cover designs. As light tints, they offer a change from the usual white paper used for text matter. In this latter capacity, they often lend an air of additional richness, buff printed in a nutty brown being an example. These brownish tints and shades seem to have a way of suggesting richness. It is difficult to fathom why this should be so, but maybe the reader has come into contact with quite intelligent people who have a bee in their bonnet that a brown egg is nicer or more nourishing than a white one, and that milk is better for being a darker tint of cream. A cream tinted paper printed in black and red is a favourite scheme. The same colours on a parchment tint may, if the typography is in keeping, suggest the antique. A shaded tint of turquoise as second colour, instead of red, will give a more placid and restrained effect.

### LETTER HEADINGS

When designing pieces such as letter headings, this placidity allied with neat attractiveness is very desirable. A clean, quiet and harmonious effect may be obtained by choosing a tint of paper and a colour of ink which are modifications of a common hue origin, e.g. a light tint and a suitably strong shaded tint of blue. Another way of looking at it is to choose a colour of ink which, when "lightened," will approximate to the tint of the paper; for example, buff tint and brown.

Remember that a letter heading must be easy to live with, attractive, but never arrogant; a quiet, clear-voiced messenger—not a megaphone. Avoid raw and glaring colours in both paper and ink. Headings for different businesses call for differing treatment. The tinted stocks in delicate blues, greens, mauves and peaches, printed in equally delicate style, reflect the daintiness of the wares of florist, modiste, milliner or beauty specialist. There is no reason, however, why the heading for an engineering firm should not be equally harmonious and attractive in a more masculine way. In other words, a certain amount of restraint is desirable in any case, without going to the extreme of anaemic illegibility. If it is proposed to use an ink of contrasting colour, care must be taken to ensure that the result is neither cheap nor raucous. Assistance in overcoming this may be obtained by subduing the hue of the ink—greying it—at the same time bringing it to a tonal value which will give the most harmonious combination with the tint of the paper. On the other hand, be sure that the colours are not lacking in hue, over-greyed, or muddy.

Those of us who have done some home decorating will know that an attempt to cover a dark surface with one coat of light paint of ordinary body is almost sure to be doomed to failure. At best, it will not be entirely satisfactory. Experience, or a practical friend, will teach us that either an undercoat must first be applied as a ground for the final coat, or else a paint of greater covering power must be used if hopes are to be entertained of completion in one coat. This should be remembered when it is proposed to print light colour on a dark background. I have, in front of me, a booklet with a dark brown cover, on which an attempt has been made to print a strong orange in ordinary letterpress ink. The result is practically and literally a washout, the colour simply fading into the background. The "craftsman" who turned out this piece was dumb in more senses than one, failing to warn the client, who was technically ignorant, of the likelihood of an unsatisfactory result.

The designer should ask himself whether a background darker than the printed colour is absolutely necessary for the purpose of effect, the standard of result he is prepared to accept and whether he is ready to spend extra money in order to attain the best possible. For the best result, an underworking of white might be necessary. On the other hand, by the use of special ink of the "cover" and "matt" class, satisfactory result might be possible in a single working. Once again, choose a good printer—one capable and willing to offer advice to any client who is not too big to consider it.

Any design, before being finally passed, should be considered on the possibilities and limitations of the medium to be employed in its reproduction. The above is an example of the limitation of ordinary letterpress ink. In order to approach the brilliance of the artist's water colours, "flat" in texture and without the least suggestion of shine, matt inks should be the medium employed. On

account of their being "supercharged" with pigment, they are solid and colourful.

Another consideration is the effect of light on the colours proposed for use. The bleaching effect of sunlight on certain colours has already been mentioned in our notes on inks. In the case of printed pieces such as posters, window displays and calendars, which are intended for a comparatively long life of exposure to strong, natural light, see that the selected inks are of a permanent nature.

When designing pieces for indoor use, the effect of illumination by artificial light should be taken into account. A strong white light will have no effect on hue, but will raise the tonal value. The main consideration, however, is artificial light which itself transmits colour. The colour may vary with the type of lamp, an example being the street standards which, as they pour forth their greenish rays, turn red omnibuses brown and transform the features of a normally healthy Briton into a semblance of a seasick Mongolian. That of course is an extreme case, and a rather nasty one at times as far as posters are concerned. Just as these street standards emit greenish rays, so the majority of electric domestic lamps give a light which includes red and yellow to a strong degree and which affects certain colours. For instance, some of the blues which appear quite attractive and brilliant in natural light will turn grey under artificial illumination. Make a point of seeing colour specimens of proposed inks under both conditions of lighting.

## A SHORT SUMMARY

Before discussing colour combination, let us make a short summary of the foregoing points regarding the choice of colour in general. It may be looked upon as a necessity when it is, in itself a selling point, an added appeal to the senses, or is part and parcel of the product. It may be used as an aid to realism, and as a means to general "descriptiveness" and atmosphere through association and other means. It may reinforce the message and make it more adequate when used in the form of a "colour adjective." Use may be made of its symbolic significance, in which case characterization or coupling through display will assist

the intended meaning. As decoration and enlivenment of a setting in typography, we have it in simple guise but one which calls for restraint and careful handling. Tonal value and luminosity can control, to a great extent, not only the temperament of a colour but its strength of penetration. Light tints suggest delicacy, spring, youth and the feminine. Dark shades carry strength and may suggest repose. For maximum carrying power, dark tints give the best result. Working a catchphrase on ourselves, all this may be included in the jingle precept: "Tune the colour to the season, product, subject, sense, or reason."

# COLOUR CIRCLES

For many years past, colour circles have been used as an aid by those engaged in evolving colour harmonies. A colour circle may be described as an arrangement of colours on a "clock face," the hues following the order of the spectrum and being placed at equal intervals. One particular circle is formed from the twelve colours which were mentioned earlier on. Placing yellow at twelve o'clock, we follow round the "hours" with yellow-orange, orange, redorange, red, red-purple, purple, blue-purple, blue, bluegreen, green and yellow-green. Sketch this out roughly and note that three straight lines drawn between the "primary colours" will form an equilateral triangle. Working to this system, any colours on the circle situated at the angles of a similar triangle will be the basis of a satisfactory three colour scheme. Colours in direct opposition are said to be complementary harmonious pairs.

The colour circle has had a good run, and without doubt has assisted in the production of some fine work, but in view of latter-day research, particularly the work of Dr. Wilhelm Ostwald, we must at least commence to ask ourselves if the old clock is up to time. Are the colours thereon standardized? Do they represent a good and adequate working range? Are the directly opposite hues—orange to blue, yellow to violet, etc., true complementaries?

Let us take the colours first. The hues composing this old circle are based upon the admixture of three so-called primaries. What are these primaries? For three-colour process printing, "pure" hues are not employed, the blue

being greenish and the red tending towards blue when a tolerably pure yellow is used. In any case, using only the three primaries, is it possible to mix a pure turquoise blue or a green approaching anywhere near emerald? Try it to be convinced that it cannot be done.

## THE OSTWALD SYSTEM

The Ostwald Colour System offers us eight principal colours as a commencing palette. We will place them in the form of a circle in their correct order—yellow, orange, red, purple, blue, turquoise, sea green, leaf green—and thereby learn that in some cases the opposite colours on the old circle are not true complementaries. For instance, the old circle tells us that the complementary to blue is orange; the revised information, as seen on the new circle, shows yellow as the complementary to blue.

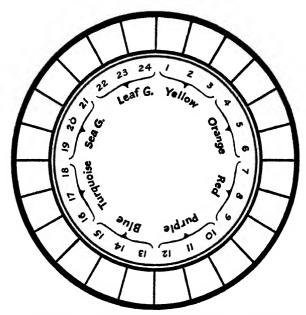
There is a rather interesting method of convincing ourselves of the correctness of Dr. Ostwald's "opposites." Taking, let us say, the blue of the Eight Standard Colours, we paint a blob on a piece of white paper. If we stare at this blob steadily for a few seconds and then, without blinking, cover it with a sheet of plain white paper, a negative or after image will appear which will be similar in shape but bright yellow in hue. Turquoise will give a definite orange, leaf green, a purple, and so on in opposites around the circle. Most of these images appear as tints, but nevertheless they are definite as to hue. Later on, we shall have something to say about the effect of these after images on colours incorporated in a design.

# THE TWENTY-FOUR-COLOUR CIRCLE

The eight-colour circle is simply a starting-point. Our complete working circle will consist of twenty-four colours divided into eight groups, the centre position of each group being occupied by one of the original eight hues, representing a normal or middle hue of the group. The hue of the colour either side of the normal will tend towards the preceding or following colour in the eight-colour circle. Thus is evolved a range of colours in which the change of hue is smooth and uniform right round the circle. While the eight-colour circle can be thought of as an arpeggio—

the doh, me, soh, doh in music—the complete range may be likened to a beautifully tuned chromatic scale.

Let us construct this circle and thereafter use it as a guide to pure colour harmonies. First, draw a circle of 2 in. radius. Inside this, describe another circle with a radius of  $1\frac{1}{2}$  in. Divide the resulting circular band into 24 equal parts. Number the compartments from 1 to 24



Suggested layout of the Ostwald Colour Circle.

in a clockwise direction, within the radius of the inner circle. Neatly fill in the Standard Colours yellow, orange, red, purple, blue, turquoise, sea green and leaf green, at divisions 2, 5, 8, 11, 14, 17, 20 and 23. There are now two spaces between each pair of principal hues which have to be so coloured as to give the impression of a smooth and uniform change of hue all round the circle. When mixing these colours we shall depend mostly on our eye, but it will be a help if we remember that when two colours are mixed in equal proportion, the result will be a half-way hue. It will therefore be appreciated that when mixing say the two

colours between yellow and orange, the first will contain—theoretically—two parts of yellow and one of orange and the second, two parts of orange and one of yellow. The circle is completed by repeating the process between orange and red, red and purple and so on round the circle back to yellow—yellow No. 1 having a greenish tinge. Bracket together each group of three numbers and, under the brackets, letter-in the "family" name of each group.

Casting a glance round the completed circle, we notice

groups of colours which, falling within a segment of 90 degrees, seem to have something in common one with another—which, in fact, they have. These are known as Analogous Colours. The group including yellow to red is an example. Yellow and orange are definitely similar, just as orange has a likeness for red. Yellow and red have no direct connection but they may be looked upon as analogous colours within the group, brought into relationship through

the "blood" of each. When choosing the colours for Analogous Harmony, it is not good policy to take two which are neighbours. They will lack interest by reason of their sameness. If more than two are to be used, take them at

orange, a colour consisting of a half and half mixture of

equal intervals, e.g. 2, 5 and 8 or 1, 3, 5 and 7.

Should a combination of analogous colours appear flat and dull, the addition of a contrasting colour—the "Intermediate Opposite"—will not only liven it up, but will assist in bringing about a better balance. Where three colours at equal intervals are employed, the intermediate opposite will be found straight across the circle from the centre colour of the three. In the case of two colours, the intermediate opposite is to be found the width of the circle away from the point half way between them.

After the soft sameness of analogous harmony, with or without the enlivenment of a contrasting colour, we pass to the blending of colours that are opposite and in contrast—Complementary Harmonies. The use of colours which are directly opposite on the circle is the method of obtaining the brightest effects. For this reason, complementary harmonies are useful in work such as poster design and other instances where brilliance of effect is the aim. Such colours are not only as far as possible different

as regards hue, but they mutually enhance each other by contrast. The reason of this mutual intensification is not far to seek. Every colour affects its surroundings with a colour impression of its opposite hue, therefore, when two complementary colours are used together, an after image is carried from one to the other, with the consequence for example—that the green "opposite" of purple will make the leaf green appear more green, and purple will be made more vividly purple by the after image of that hue which is carried, by the eye, from the green. The form of a design has, in itself, an effect on colour balance, but it should be borne in mind, in any case, that the brighter colour should occupy the smaller area. Relative luminosity should also be taken into account. In this direction, yellow No. 1 and blue No. 13 show the widest range of difference. It will take quite a wide expanse of blue to balance a small area of such a yellow.

Modifications of the above "opposite" combinations are known as Split Complementary Harmonies. Commencing with a particular colour, we select two others which lie close to and either side of the direct complementary and are equidistant from it. For example, starting with turquoise 16, we have yellow 1 and red 7 as our pair of split complementaries. We may, if we choose, retain the direct complementary also, which is orange 4. As in the case of analogous harmony, the use of contiguous colours on the twenty-four-colour circle is not recommended. On the eight-colour circle, however, they will, of course, be the colours either side of the direct opposite. It is simply a matter of affording sufficient difference in the hue of the "split" colours that it may be adequately felt.

### STEPPING THE CIRCLE

The last method to be put forward dealing with the harmony of pure colours is known as Stepping the Circle. A selection is made from colours situated at such distance apart that they divide the circle into a number of equal parts—2, 3, 4, 6 or 8. When the circle is subdivided into three or more parts, one or more of the available colours may be omitted, with advantage to the interest of the scheme. Here are examples of the various steppings—5

and 17; 2, 10 and 18; 6, 12, 18 and 24; 2, 6, 10 to 22; 1, 4, 7 to 22. It will be noticed that equal steps continually enter for consideration. The large colour circle is built with equal steps between adjacent hues and the principle of equal interval enters into most of the schemes of harmony. This principle of equal steps and uniformity of change in colours—a change of which the eye is judge—is the bedrock of the Ostwald Colour System.

Falling back on our musical analogy, we can say that the harmonies recently dealt with have been played in the key of C—the open key of full colour. When it is wished to raise or lower the general pitch of a musical scale and at the same time retain its character, it is necessary to raise or lower each individual note by an equal amount. The same applies to our colour scale. By adding an equal quantity of white, black or grey to each of the hues in the pure colour circle, we bring into being what are known as Equal Tint, Equal Shade and Equal Greyed Circles. The pitch of the resulting scale will, of course, vary with the amount of added white or black, or the proportion of white to black contained in the added grey.

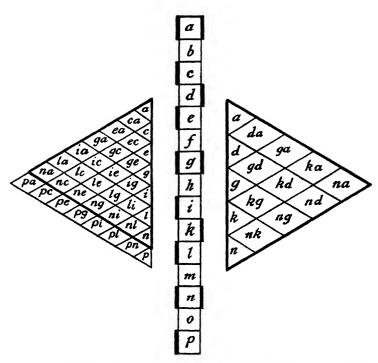
Working along identical lines to those employed when dealing with pure colour, harmonies may be built up from these circles of Equal Tint, Equal Shade and Equal Greyed Colour. Owing to the fact that tints, shades and greyed colours harmonize, and also that they are in harmony with their parent colour, it is possible to introduce pure hue into a scheme in which they are employed. Pure colour should, however, appear in very limited quantity, lest it should over-dominate the quiet beauty of the weaker colours. Pitch must always be borne in mind. Every scheme of harmony must have, as its "tonic note," a colour selected from a particular circle—pure colour, tint, shade or greyed. Selection of "notes" of equal pitch of scale to mate with it will preserve the key of the scheme. Colours outside that certain scale-pitch of tint, shade or greyed colour will be "accidentals" or maybe "essential discords," included with the idea of introducing enlivenment or of adding interest. These helpful "discords" may take the form of small areas of pure colour in an otherwise quiet scheme, reversal of the natural state of relative

luminosity, e.g. an orange darker than an accompanying turquoise, or the inclusion—again in very small quantity—of a colour which is normally out of phase with the equal interval principle of selection.

### TONED COLOURS

So far, our consideration of harmonies has included the use of equal colours-either in the sense of their being hues which are equal in purity, or colours containing an equal amount of a specified neutral. We have now to deal with the correct combination of toned colours—tints, shades and greved colours of varying pitch of tone—and a method of selecting them that they may be at correct interval and otherwise in tune with the scheme in which they are included. Just as the colour circle is of great help in the selection of equal colour notes in general, and in the formation of such schemes as we have already dealt with, so will be a chart which will assist choice of varying vet mutually related tones either in a single hue or in a multicolour combination. This chart is known as the monochromatic or one-colour triangle, in which a single pure huc is displayed, together with a selection of modifications or gradations brought about by the admixture with neutrals, transition from tone to tone appearing equal and uniform to the eve.

The number of colours displayed in the triangle depends upon the number of neutrals employed. The original Ostwald triangle is based upon fifteen neutrals, running from white to black through thirteen greys. Commencing with white, these are marked alphabetically from a to p, the j being excluded. The resulting 2535 colours are something more than adequate for ordinary use. For technical purposes, a triangle is based on Ostwald's "Practical Grey Scale" which is formed by taking the alternate shades—a, c, e, g, i, l, n and p. Both these triangles, however, include a saturated hue pa which is purer, and p black which is denser, than is likely to be met with in the coloured papers obtainable for the construction of these charts, or in the poster colours which we propose to use. Our saturated colour will therefore be grade na—based upon n black, both colour and black having the same

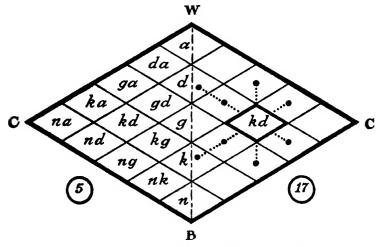


In this diagram, the column of lettered rectangles in the centre represents the full Ostwald Neutral Scale in which there are equal gradations of tone from white (a) to black (p) through thirteen intermediate greys. The thick vertical lines placed against certain "tones" illustrate the principle of selection at equal interval. "Ostwald's Practical Grey Scale" is formed by taking the eight alternate shades from a to p. For average purposes, however, grade n will be accepted as the practical density for our black. Selections of three, four, five or seven tones may be made from the a to nscale as follows: a, g (middle grey) and n. a, e, i and n; a, d, g, kand n, a, c, e, g, i, l and n. Based upon n black, our saturated colour will be na, both colour and black having the same content of white. The number of colours included in the monochromatic triangle depends upon the number of neutrals on which it is based. The method of constructing and using the triangle is dealt with in the text.

content of white. Also, for instructional purposes, we need not construct so large a triangle. Five neutrals including white, black and three intermediate greys will be sufficient for our purpose. Taken at equal intervals and from a to n, the reference letters of our scale will read: a, d, g, k and n.

### MAKING THE SINGLE-HUED CHART

Now for the making of this single-hued chart. Construct an equilateral triangle with  $2\frac{1}{2}$  in. lines and with one of its



A double triangle embodying two single-hued triangles of complementary colours. The neutral row runs vertically down the centre and is common to both triangles. The reference letters have been used simply as an aid to description and construction, and may be dispensed with when the principle is grasped. A full "star" of mating positions to a given key colour is shown in the right-hand triangle.

sides perpendicular. The reason of this will be apparent later. Divide each side into five equal parts. With lines parallel to one of the sloping sides, join the points of division upon the second sloping side with those on the vertical line. Repeat with lines parallel to the other sloping side. We have now divided the triangle into ten diamond-shaped and five triangular compartments.

Next, brush in the neutrals. These will occupy the triangular spaces adjacent to the vertical line, so that

tints ascend to white and shades descend to black. Commencing with three neutral pigments, paint the top triangle white, the third with middle grey (g), and the bottom one with black (n). Mix and paint in two more tones which appear to be half way between white and mid grey, and mid grey and black. This finished, we shall have a neutral scale which appears to run in equal steps from white to black. It will be as well to point out that the principle of mixing colours in equal proportion in order to obtain a mid-way hue does not hold for neutrals. In a neutral scale running in equal steps of sensation, the content of white in the succeeding greys increases from black to white (or decreases from white to black), in geometrical progres-Succeeding values do not represent addition or reduction by an equal and fixed amount, but a uniform rate of multiplication or division at any particular point in order to produce the value which follows. An example will make this quite clear. If we take the figures 2, 4, 6, 8 and 10, there is a uniform rate of increase by the addition of 2. Commencing again with 2 and multiplying successively by, for instance 2, we form a geometrical progression -2, 4, 8, 16 and 32. It is in this latter manner that the white content grows as a grev lightens.

Returning to our triangle, in which the neutral scale is completed. Commencing with white, give each neutral its distinguishing sign by placing the lower-case letters a, d, g, k and n alongside, outside the triangle and sufficiently close to the vertical line. Notation is completed by lettering upper-case characters at each corner—W for White at the upper point, B, for Black at the lower, and C for Colour at the remaining point. Any colour in the triangle is situated at the intersection of two rows and so, by taking the letters of the neutrals in which the rows commence, a distinguishing sign is formed for each colour in a particular triangle. The letter towards the black end of the neutral scale must always appear first. Thus, the symbol of the "pure" colour series which we will use in conjunction with n Black will be na—na Red, na Turquoise, etc. Using the numbers on the colour circle, a pure colour may be described as 1na, 2na, 3na, and so on up to 24na.

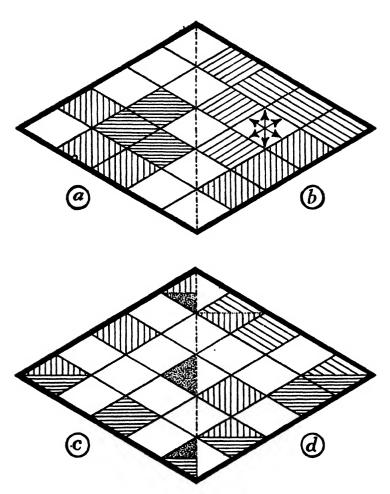
We can now fire away with the colouring. Take a pure

colour, say orange, red or sea green, and fill in the diamond at C. Three tints between C and W have now to be brushed in. If we first mix a tint which appears to lie between full colour and white to fill the space ga, the other two intermediate tints will be more easily arrived at. Repeat this graduation in shades between C and B. Three spaces now remain in the interior of the triangle, which are to be occupied by greyed colours. Mix a colour which appears as half way between tint ga and shade ng, and fill in the diamond situated at kd. There are now two rows which are incomplete—one parallel to the tints and the other to the shades. Complete them by filling in the half-way colour between kd and d, and then the one between kd and k. Your one-colour triangle is now complete.

### DOMINANT HARMONY

The harmonies which have been discussed up to date have been based upon differing colours of equal tint, equal shade and equal grey-variation of hue, but a common factor in an equal content of a specified neutral. We will now deal with harmonies using a single hue, together with its tints, shades and greys, as seen in the triangle just constructed. Although the majority of harmonies contain a colour which is the dominant note, the term Dominant Harmony is generally understood to describe a scheme which is carried out in colours derived from a single hue. It was so named by Chevreul, a famous authority, and the description has stuck. When choosing for Dominant Harmony, it should be remembered that colours in rows running parallel to the tint row contain an equal amount of black. Lines which are parallel to the row of shades include colours with an equal amount of white. Equal pure colour rows run parallel to the line of neutrals.

From this it will be appreciated that harmonizing mates for any particular colour may be chosen from all rows in which that colour is situated. In the case of pure colour and black, we have two rows only from which to choose. In the instance of pure colour, we may pass through the tints to white and through the shades to black. When dealing with black, we have the neutral scale to white, and through the shades to pure colour. Using any of the other



Harmonizing mates chosen from the triangle in accordance with the principle of equal interval. (a) Any three contiguous colours may be used together. (b) In any single row parallel to a side of the triangle, three or more "joined" colours may be employed. This of course includes the neutral row. (c) The omission of alternate colours still brings a selection at equal interval. In the present example, extension is restricted by the size of the triangle. Turn to the figure based upon seven neutrals and note how much wider is the choice. (d) Examples of unequal steps—which should be avoided. In each of these groups of three colours, the middle component is twice as far removed from one accompanying colour as from the other. Being out of step, such selection of tones is most likely to lack smoothness and rhythm.

colours as "key," we shall have three rows from which to choose. A single example will make this clear. Supposing our key colour to be ka. Colours in the a row will include pure colour na, the tints ga and da, together with white. In the k row we have kd and kg as greyed colours, and the third grey, k. As ka is also situated in an equal pure colour row, we have the offer of the first shade also—nd.

As in the case of the colour circle, the principle of selection at equal interval should be adhered to. For instance, any three contiguous colours may be used in combination, e.g. ka, nd and ng, or ka, nd and kd. Working along any single row parallel to a side of the triangle, three or more "joined" colours may be employed, such as na, ka, and ga. Our choice will still be at equal interval if we omit alternate colours. In such case the selection of na, ng and n, or a, g and n would be permissible, but not na, ng and nk, or da, kg and nk.

### VALUE OF THE NEUTRAL SCALE

The value of the neutral scale in harmony building should not be overlooked. Dominant Harmony in greys may be constructed on similar principles to those utilized in the evolution of single hued or self-coloured schemes. At least three shades should be used for a really satisfactory effect, and should be selected at equal intervals along the scale, as in the instance of colours. When neutrals are added to a scheme of hues, they must match the black or white content of the colours. In other words, the index letter of the chosen neutral must be found in the two letter symbol of the colour. For instance, supposing a combination of two hues of kd value, the permissible neutrals would be k and d. The use of black would most likely be the striking of a false note. This would be still further pronounced if the selected hues were situated in the tint series and were of high luminosity.

The contrast of grey against hue may be taken advantage of in the form of neutral borders or backgrounds. A white background has the effect of making colours appear darker. The reverse is the case with a ground of black. It is simply a matter of relative luminosity. Black will bring the maximum of sparkle out of pure colour, but tints

require something more delicate in the form of a light grey. Resting of the eye upon a neutral has the effect of making colours appear brighter. Contrast may therefore be helped by the inclusion of a neutral border. Black or grey, according to the tonal effect required, will be found best for this.

### A SUMMARY

During our discussion of the Ostwald Colour System, we dealt first with the Pure Colour Circle. We learned the method of building Analogous Harmonies, with or without the Intermediate Opposite. Next came Complementary Harmony, with Three Colour Split Complementary as its modification. It was shown how a selection of colours may be made by Stepping the Circle. We realized how these same harmonies may be raised or lowered in pitch by selecting colours from Equal Tint, Equal Shade and Equal Greyed Colour Circles. Up till then, our schemes were built with Equal Colours. The next stage included the construction of the One-Colour Triangle together with a description of the method by which harmonies may be built from colours of a single hue, which colours, however, vary in tone or value—Dominant Harmony. Summing up, the harmonies to date have been formed, either from a variety of hues of equal value, or from a variety of values of a single hue. Finally, let us see how the system deals with a combination of colours varying both in hue and value.

Let us reconsider the construction of the single-hued triangle. Whatever the hue, the symbol letters and position in the triangle will always be the same for any particular tint, shade or greyed colour. The neutral scale is common to all triangles, irrespective of the basic hue. Being based upon the spacing of the neutral scale, the interval between any two positions will therefore be correspondingly similar for triangles of equal size.

Imagine twenty-four such triangles—one for each of the hues. Placed in position as vertical planes equally dividing a circle, their order corresponding with that of the colour circle, and with their neutral scales brought together so that the line WB acts as a common axis, they form a "model" known as the Ostwald Colour Solid—or rather

the "bones" of a solid double cone, the surface contour of which would be traced by revolving one of the triangles through a complete circle on its axis WB, such axis being in a perpendicular position, with W at the summit. During the course of this revolution, the point C of the triangle will trace an "equator." At points equidistant along this equator, we find the pure colours. Colours which, although differing in hue, carry the same symbol letters, lie in the same horizontal plane and consequently will form further circles. These will be of equal tint, equal shade or equal greyed colours, according to their position in the solid—or the position of a component colour in its triangle.

Such an arrangement, based upon five neutrals, incorporates a system of 245 colours, each of which, besides being a member of a particular colour circle, is bound in harmony to certain other colours by the tie of "equal content." We have seen that, within the confines of a single-hued triangle, mates for harmonizing with any particular colour may be taken from all rows in which that colour is situated. The intersection of these rows-of equal pure colour, equal white and equal black content forms a "star" which will vary in its state of completeness according to the position of the key colour in the triangle. Reference to the triangle will show that if we choose pure colour as our key, the "star" will simply consist of the meeting of two rows. The star in a tint or shade row will be similarly incomplete, with rays running only four ways, whereas the "beams" from a grey-colour key will extend in six directions. Nevertheless, whatever the colour we choose as key, there is a choice from our particular triangle of six other colours and two neutrals with which to mate it.

Each of the selected colours is equal to its corresponding position in any triangle of a different hue, which is to be incorporated in the scheme. The equal content rows form a star in the triangle with which we commence. Colours of common symbol—equal colours—form circles or "rings." Similar stars will therefore be formed, by the points of intersection of rings and colour planes, in any further triangles employed. From the resultant collection of possible colours thus traced out in the triangles involved, we have a good range from which to construct combinations

which Dr. Ostwald has named "Ring-Star" Harmonies. This combined working of circle and triangle is a full exemplification of the principle of equality of interval and smoothness of transition, which are the distinguishing features of the Ostwald System.

#### CHOOSING THE COLOUR SCHEME

When a colour scheme is under consideration, the first thought goes to the question of fitness to purpose; whether it is to be light and airy, bright and sparkling, bold and colourful, quiet and mysterious, subdued yet comforting, clean and cool or warm and cheery. The next point to be decided is the number of hues to be incorporated and the type of harmony which they are to form—whether analogous, complementary, stepped circle, etc., Having chosen the hues on an equal interval scale, pitch or value must be fixed which must accord with that of the colour looked upon as the key. In other words, all commencing colours in the scheme must belong to an equal colour "ring," which is the circle to which the key belongs. We thus have, in each of the triangles employed, a commonly oriented starting point or "tonic note" from which we may extend values up or down (in the direction of white, black, grey or colour), by means of tones exhibiting a smooth uniformity of change, owing to their being chosen from scales set out on the principle of equal interval of sensation. The starting colour in each triangle is the focal point of a "star," and extension is carried out according to the rules already laid down. Which colours to extend—in range of values—will depend upon the needs of the scheme, the balance of areas with regard to brightness, and according to the required dominance of any particular hue and its modifications. In any case, question the use of too much pure colour: reserve it for small areas only. See that contrasts are neither blatant nor harsh. If necessary, tame the colours by the raising or lowering of their value. If a colour in the design be too forceful or brilliant, try extending it towards the darker depths. On the other hand, if a naturally dark scheme tends too much towards gloom, introduce a little brightness in the form of soft and lighter colour, in small but "telling" areas.

### ADVANTAGES OF THE OSTWALD SYSTEM

Our outline study of the Ostwald Colour System is finished. Now for a few reasons why we should consider its adoption as a basis of our colour practice. It is the method employed for the teaching of colour harmony in 80 per cent of the schools. It offers a colour circle in which the standardized hues are correctly placed, and vary one from another in a manner which is psychologically uniform. Working with the unit triangles, singly and in combination, the relationship between tints, shades and greyed colours may more easily be realized. Pure colours are included in the circle which are impossible to produce by the admixture of the three so-called primaries.

Certain writers contend that one is either born with a colour sense or lacking it; that the use of colours and their combination cannot be learned. If this be entirely true, why write upon the subject at all? It has also been said that the Ostwald System tends to cramp individuality. So can any other system which, in addition, may not equal it in efficiency! The finest work in any sphere is developed from orderly beginnings. A tuned instrument is a great help to a pianist—a necessity—even to a Paderewski or a Cortot. The long and the short of it is that all compositions and harmonies are built upon a tuned scale, and depend for their success upon the correct method of selection and subsequent combination of the component notes. The Ostwald Colour System offers this scale from which we may more easily build the general form of our harmonies. Further refinement and subtlety of handling thereafter depend upon individual taste—or genius. Should orange be preferred as the opposite to blue, or yellow to purple, the designer may thoroughly please himself by the simple process of stepping the circle. There is nothing lost by the adoption of the Ostwald System; on the contrary, much is to be gained. For further information the reader is referred to Dr. Ostwald's "Colour Science," published by Messrs. Winsor & Newton Ltd.

However, the simple process of reading the "dots" of a melody never produced a song. To make music, we must actually strike the notes. As practice advances the musician, so it can develop the faculty for colour harmony. All around us in our daily life, we encounter harmony, or the lack of it. We see it in clothing, interior decoration, gardens, carpets, cushions, curtains, upholstery, window display, cartons, fancy boxes, posters and booklets. As an interested student, do not simply sense, but see! Analyse the good and pleasing harmonics, noting their composition and balance. Constructively criticize the bad ones, noting the effect of hues selected "out of tune," ill-"starred" colour combinations, neutrals of incorrect pitch, precipice leaps in relative luminosity and bad distribution of quantities. Note the extension of various colours towards light and dark, deciding whether or no the intervals of gradation appear right. Most important of all, sit down with pots, brushes and paper, and turn out some original work. Learn by errors, take heart from mild success, and invite progress by perseverance. A good deal may be learned during the process of constructing a colour circle or triangle.

How much of the complete Colour Solid need we construct? The pure colour circle, triangles, and the complete solid which they compose are, after all, things to guide and not to frighten us. The necessary completeness of our own particular system will depend upon our powers of imagination and adaptation. Nevertheless, there are few whose colour sense is so highly developed that a system, consisting of a twenty-four-hue pure colour circle and a full quota of triangles, would not be a prized and highly useful possession. Construct it—even in easy stages! For convenience and compactness, use double triangles divided by a common neutral scale and comprising pairs of complementary colours. The circle and triangles may be mapped out to a size larger than the dimensions suggested, but in any case a small margin between the colours will make for a clearer and better effect. Provide room outside the triangle for the indication of the circle number of the colour.

### EQUIPMENT

Finally, what of the equipment required? Our eleven pots of poster colours will include the eight Ostwald Standard Hues (Na), White (a), Middle Grey (g), and Black (n). Brushes will consist of a sable No. 5 or No. 6 for general

broad work and perhaps a No. 1 for smaller detail. Six-inch white tiles make quite good mixing slabs. Three of these may be bought for 6d. or very little more. Next, a palette knife with a 4 in. blade, good and flexible. A glass jam-jar will do service as a water pot—avoid pots of thimble size. The artists' colourman will have a good choice of boards and cards of good surface, suitable for the construction of the circle and triangles.

Before commencing work, here are a few points which should be borne in mind. Stir the colour well before use. Never dip the brush in the pot, but transfer the required amount to the slab by means of the palette knife. If the colour thickens in the pot, add a little gum arabic and stir thoroughly. This will not only thin it out to an easy working consistency, but will prevent rubbing and peeling. Make a habit of clean working. See that pots are not contaminated by even the slightest trace of other colours. Have plenty of clean non-linting rag to hand for the purpose of cleaning up. Water is cheap; change it at frequent intervals. When mixing pigments, see that they are thoroughly amalgamated. Squeeze the colour well down on the slab with the palette knife and turn it over often, in similar manner to a builder mixing cement for pointing bricks. Give the surface body, without piling up the colour unduly. The use of too much pigment, laid on like clay, is an invitation to peeling. On the other hand, see that the laying-in is something more than simply a stain which may lack the full and normal hue of the colour employed.

When laying-in extensive areas, it is a matter of finding the tool best suited to the hand. Some may find that a smoother surface is obtained by the use of a small sable, while others may prefer the spring of a small size in hog bristle. This, and many other things will be revealed in the course of practice.

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